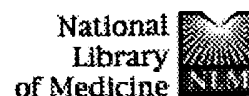


WEST Search History

DATE: Friday, March 05, 2004

<u>Hide?</u>	<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>
	<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ</i>		
<input type="checkbox"/>	L29	L28 AND 435/325.CCLS.	52
<input type="checkbox"/>	L28	GFAP AND nestin AND neuron	206
<input type="checkbox"/>	L27	L17 AND L26	31
<input type="checkbox"/>	L26	(NS4)	707
<input type="checkbox"/>	L25	L24 NOT Rosen-Craig-A.IN.	126
<input type="checkbox"/>	L24	L21 AND L23	127
<input type="checkbox"/>	L23	FGF OR EGF OR amphiregulin	17082
<input type="checkbox"/>	L22	FGF OR TGF	16270
<input type="checkbox"/>	L21	L17 AND L19 AND L20	143
<input type="checkbox"/>	L20	nestin	1633
<input type="checkbox"/>	L19	GFAP OR glial-fibrillary-acidic-protein	1132
<input type="checkbox"/>	L18	L17 AND GFAP	340
<input type="checkbox"/>	L17	435/325,366,368,378.CCLS.	15431
<input type="checkbox"/>	L16	Wictorin-K.IN.	1
<input type="checkbox"/>	L15	Wictorin-Klas.IN.	0
<input type="checkbox"/>	L14	Wictorin.IN.	6
<input type="checkbox"/>	L13	Eriksson-C.IN.	26
<input type="checkbox"/>	L12	Eriksson-Cecilia.IN.	0
<input type="checkbox"/>	L11	Eriksson.IN.	3619
<input type="checkbox"/>	L10	Skoijh-C.IN.	0
<input type="checkbox"/>	L9	Skoijh-Charlotta.IN.	0
<input type="checkbox"/>	L8	Skoijh.IN.	0
<input type="checkbox"/>	L7	Campbell-Ken.IN.	0
<input type="checkbox"/>	L6	Campbell-K.IN.	18
<input type="checkbox"/>	L5	Campbell.IN.	19948
<input type="checkbox"/>	L4	Campbell-Kenneth.IN.	5
<input type="checkbox"/>	L3	Wahlberg-Lars.IN.	11
<input type="checkbox"/>	L2	Wahlberg-L.IN.	10
<input type="checkbox"/>	L1	(Wahlberg.IN.)	520

END OF SEARCH HISTORY



Entrez PubMed Nucleotide Protein Genome Structure OMIM PMC Journals Books

Search PubMed for GFAP AND nestin Go Clear

Limits Preview/Index History Clipboard Details

About Entrez

Display Summary Show: 500 Sort Send to Text

Items 1-213 of 213

One page.

Text Version

Entrez PubMed

Overview

Help | FAQ

Tutorial

New/Noteworthy

E-Utilities

PubMed Services

Journals Database

MeSH Database

Single Citation Matcher

Batch Citation Matcher

Clinical Queries

LinkOut

Cubby

Related Resources

Order Documents

NLM Gateway

TOXNET

Consumer Health

Clinical Alerts

ClinicalTrials.gov

PubMed Central

Privacy Policy

1: Dong XX, Liu JB, Dong YX.

Related Articles, Links



[Experimental study on effect of gastrodia in inducing the differentiation of mesenchymal stem cells into neuron-like cells]

Zhongguo Zhong Xi Yi Jie He Za Zhi. 2004 Jan;24(1):51-4. Chinese.

PMID: 14976891 [PubMed - in process]

2: Maslov AY, Barone TA, Plunkett RJ, Pruitt SC.

Related Articles, Links



Neural stem cell detection, characterization, and age-related changes in the subventricular zone of mice.

J Neurosci. 2004 Feb 18;24(7):1726-33.

PMID: 14973255 [PubMed - in process]

3: Wang YH, Liu YJ, Lu HL, Liu ZH, Jiang XD, Xu RX, Zhou ZJ, Zou YX, Chen YZ.

Related Articles, Links



In vitro culture and induced differentiation of adult rat neural stem cells from the corpus striatum.

Di Yi Jun Yi Da Xue Xue Bao. 2004 Feb;24(2):192-4.

PMID: 14965825 [PubMed - in process]

4: Shiras A, Bhosale A, Shepal V, Shukla R, Baburao VS, Prabhakara K, Shastry P.

Related Articles, Links



A unique model system for tumor progression in GBM comprising two developed human neuro-epithelial cell lines with differential transforming potential and coexpressing neuronal and glial markers.

Neoplasia. 2003 Nov-Dec;5(6):520-32.

PMID: 14965445 [PubMed - in process]

5: Kucia M, Ratajczak J, Reza R, Janowska-Wieczorek A, Ratajczak MZ.

Related Articles, Links



Tissue-specific muscle, neural and liver stem/progenitor cells reside in the bone marrow, respond to an SDF-1 gradient and are mobilized into peripheral blood during stress and tissue injury.

Blood Cells Mol Dis. 2004 Jan-Feb;32(1):52-7.

PMID: 14757413 [PubMed - in process]

6: Jang YK, Park JJ, Lee MC, Yoon BH, Yang YS, Yang SE, Kim SU.

Related Articles, Links



Retinoic acid-mediated induction of neurons and glial cells from human umbilical cord-derived hematopoietic stem cells.

J Neurosci Res. 2004 Feb 15;75(4):573-84.

PMID: 14743441 [PubMed - in process]

7: Ji JF, He BP, Dheen ST, Tay SS.




















Related Articles, Links



Expression of chemokine receptors CXCR4, CCR2, CCR5 and CX3CR1 in neural progenitor cells isolated from the subventricular zone of the adult rat brain.

Neurosci Lett. 2004 Jan 30;355(3):236-40.

PMID: 14732474 [PubMed - in process]

-  **8:** [Mignone JL, Kukekov V, Chiang AS, Steindler D, Enikolopov G.](#) [Related Articles](#), [Links](#)
 **Neural stem and progenitor cells in nestin-GFP transgenic mice.**
J Comp Neurol. 2004 Feb 9;469(3):311-24.
PMID: 14730584 [PubMed - in process]
-  **9:** [Zhang H, Wang JZ, Sun HY, Zhang JN, Yang SY.](#) [Related Articles](#), [Links](#)
 **The effects of GM1 and bFGF synergistically inducing adult rat bone marrow stromal cells to form neural progenitor cells and their differentiation.**
Chin J Traumatol. 2004 Feb;7(1):3-6.
PMID: 14728810 [PubMed - in process]
-  **10:** [Shi Y, Chichung Lie D, Taupin P, Nakashima K, Ray J, Yu RT, Gage FH, Evans RM.](#) [Related Articles](#), [Links](#)
 **Expression and function of orphan nuclear receptor TLX in adult neural stem cells.**
Nature. 2004 Jan 1;427(6969):78-83.
PMID: 14702088 [PubMed - indexed for MEDLINE]
-  **11:** [Calza L, Fernandez M, Giuliani A, Pirondi S, D'Intino G, Manservigi M, De Sordi N, Giardino L.](#) [Related Articles](#), [Links](#)
 **Stem cells and nervous tissue repair: from in vitro to in vivo.**
Prog Brain Res. 2004;146:75-91.
PMID: 14699957 [PubMed - indexed for MEDLINE]
-  **12:** [Schumm MA, Castellanos DA, Frydel BR, Sagen J.](#) [Related Articles](#), [Links](#)
 **Improved neural progenitor cell survival when cogenerated with chromaffin cells in the rat striatum.**
Exp Neurol. 2004 Jan;185(1):133-42.
PMID: 14697324 [PubMed - indexed for MEDLINE]
-  **13:** [Scemes E, Duval N, Meda P.](#) [Related Articles](#), [Links](#)
 **Reduced expression of P2Y1 receptors in connexin43-null mice alters calcium signaling and migration of neural progenitor cells.**
J Neurosci. 2003 Dec 10;23(36):11444-52. Erratum in: J Neurosci. 2004 Jan 7;24(1):302.
PMID: 14673009 [PubMed - indexed for MEDLINE]
-  **14:** [Ben-Hur T, Ben-Menachem O, Furer V, Einstein O, Mizrahi-Kol R, Grigoriadis N.](#) [Related Articles](#), [Links](#)
 **Effects of proinflammatory cytokines on the growth, fate, and motility of multipotential neural precursor cells.**
Mol Cell Neurosci. 2003 Nov;24(3):623-31.
PMID: 14664813 [PubMed - in process]
-  **15:** [Schwartz PH, Bryant PJ, Fuja TJ, Su H, O'Dowd DK, Klassen H.](#) [Related Articles](#), [Links](#)
 **Isolation and characterization of neural progenitor cells from post-mortem human cortex.**
J Neurosci Res. 2003 Dec 15;74(6):838-51.
PMID: 14648588 [PubMed - indexed for MEDLINE]
-  **16:** [Enzmann V, Howard RM, Yamauchi Y, Whittemore SR, Kaplan HJ.](#) [Related Articles](#), [Links](#)
 **Enhanced induction of RPE lineage markers in pluripotent neural stem cells engrafted into the adult rat subretinal space.**
Invest Ophthalmol Vis Sci. 2003 Dec;44(12):5417-22.
PMID: 14638746 [PubMed - indexed for MEDLINE]
-  **17:** [Morte B, Manzano J, Scanlan TS, Vennstrom B, Bernal J.](#) [Related Articles](#), [Links](#)



Aberrant maturation of astrocytes in thyroid hormone receptor alpha 1 knockout mice reveals an interplay between thyroid hormone receptor isoforms.

Endocrinology. 2004 Mar;145(3):1386-91. Epub 2003 Nov 20.

PMID: 14630717 [PubMed - in process]

☐ 18: [Yang P, Hernandez MR.](#)

[Related Articles, Links](#)



Purification of astrocytes from adult human optic nerve heads by immunopanning.

Brain Res Brain Res Protoc. 2003 Oct;12(2):67-76.

PMID: 14613807 [PubMed - indexed for MEDLINE]

☐ 19: [Kim DH, Heo SD, Ahn MJ, Sim KB, Shin TK.](#)

[Related Articles, Links](#)



Activation of embryonic intermediate filaments contributes to glial scar formation after spinal cord injury in rats.

J Vet Sci. 2003 Aug;4(2):109-12.

PMID: 14610361 [PubMed - indexed for MEDLINE]

☐ 20: [Walder S, Zhang F, Ferretti P.](#)

[Related Articles, Links](#)



Up-regulation of neural stem cell markers suggests the occurrence of dedifferentiation in regenerating spinal cord.

Dev Genes Evol. 2003 Dec;213(12):625-30. Epub 2003 Nov 08.

PMID: 14608505 [PubMed - in process]

☐ 21: [Ratajczak MZ, Kucia M, Rea R, Majka M, Janowska-Wieczorek A, Ratajczak J.](#)

[Related Articles, Links](#)



Stem cell plasticity revisited: CXCR4-positive cells expressing mRNA for early muscle, liver and neural cells 'hide out' in the bone marrow.

Leukemia. 2004 Jan;18(1):29-40.

PMID: 14586476 [PubMed - indexed for MEDLINE]

☐ 22: [Fukuda S, Kato F, Tozuka Y, Yamaguchi M, Miyamoto Y, Hisatsune T.](#)

[Related Articles, Links](#)



Two distinct subpopulations of nestin-positive cells in adult mouse dentate gyrus.

J Neurosci. 2003 Oct 15;23(28):9357-66. Erratum in: J Neurosci. 2004 Jan 7;24(1):24.

PMID: 14561863 [PubMed - indexed for MEDLINE]

☐ 23: [Ha Y, Kim TS, Yoon DH, Cho YE, Huh SG, Lee KC.](#)

[Related Articles, Links](#)



Reinduced expression of developmental proteins (nestin, small heat shock protein) in and around cerebral arteriovenous malformations.

Clin Neuropathol. 2003 Sep-Oct;22(5):252-61.

PMID: 14531551 [PubMed - indexed for MEDLINE]

☐ 24: [Kang SK, Jun ES, Bae YC, Jung JS.](#)

[Related Articles, Links](#)



Interactions between human adipose stromal cells and mouse neural stem cells in vitro.

Brain Res Dev Brain Res. 2003 Oct 10;145(1):141-9.

PMID: 14519500 [PubMed - indexed for MEDLINE]

☐ 25: [Rodriguez-Perez LM, Perez-Martin M, Jimenez AJ, Fernandez-Liebrez P.](#)

[Related Articles, Links](#)






















Immunocytochemical characterisation of the wall of the bovine lateral ventricle.


Cell Tissue Res. 2003 Dec;314(3):325-35. Epub 2003 Sep 26.

PMID: 14513354 [PubMed - in process]

☐ 26: [Suzuki T, Ooto S, Akagi T, Amemiya K, Igarashi R, Mizushima Y, Takahashi M.](#)

[Related Articles, Links](#)

-  **Effects of prolonged delivery of brain-derived neurotrophic factor on the fate of neural stem cells transplanted into the developing rat retina.**
Biochem Biophys Res Commun. 2003 Oct 3;309(4):843-7.
PMID: 13679050 [PubMed - indexed for MEDLINE]
-  **27:** Shu T, Puche AC, Richards LJ. [Related Articles](#), [Links](#)
-  **Development of midline glial populations at the corticoseptal boundary.**
J Neurobiol. 2003 Oct;57(1):81-94.
PMID: 12973830 [PubMed - indexed for MEDLINE]
-  **28:** Mayer EJ, Hughes EH, Carter DA, Dick AD. [Related Articles](#), [Links](#)
-  **Nestin positive cells in adult human retina and in epiretinal membranes.**
Br J Ophthalmol. 2003 Sep;87(9):1154-8.
PMID: 12928287 [PubMed - indexed for MEDLINE]
-  **29:** Bai Y, Lin C, Hu Q, Li X, Lu A, Wang S, Li L, Shen L. [Related Articles](#), [Links](#)
-  **[The induction of neuronal differentiation in the glial fibrillary acid protein positive human neural progenitor cell line]**
Beijing Da Xue Xue Bao. 2003 Jun 18;35(3):266-70. Chinese.
PMID: 12914242 [PubMed - indexed for MEDLINE]
-  **30:** Bennett MR, Rizvi TA, Karyala S, McKinnon RD, Ratner N. [Related Articles](#), [Links](#)
-  **Aberrant growth and differentiation of oligodendrocyte progenitors in neurofibromatosis type 1 mutants.**
J Neurosci. 2003 Aug 6;23(18):7207-17.
PMID: 12904481 [PubMed - indexed for MEDLINE]
-  **31:** Nakamura T, Xi G, Hua Y, Hoff JT, Keep RF. [Related Articles](#), [Links](#)
-  **Nestin expression after experimental intracerebral hemorrhage.**
Brain Res. 2003 Aug 15;981(1-2):108-17.
PMID: 12885431 [PubMed - indexed for MEDLINE]
-  **32:** Zhang L, Tang S, Luo Y, Huang B, Zhang C, Chen X. [Related Articles](#), [Links](#)
-  **[In vitro differentiation of embryonic stem cells mediated by the supernatant of retinal cells and retinoid acid]**
Yan Ke Xue Bao. 2003 Jun;19(2):122-5. Chinese.
PMID: 12870351 [PubMed - in process]
-  **33:** Garbuzova-Davis S, Willing AE, Zigova T, Saporta S, Justen EB, Lane JC, Hudson JE, Chen N, Davis CD, Sanberg PR. [Related Articles](#), [Links](#)
-  **Intravenous administration of human umbilical cord blood cells in a mouse model of amyotrophic lateral sclerosis: distribution, migration, and differentiation.**
J Hematother Stem Cell Res. 2003 Jun;12(3):255-70.
PMID: 12857367 [PubMed - indexed for MEDLINE]
-  **34:** Lacza Z, Horvath E, Busija DW. [Related Articles](#), [Links](#)
-  **Neural stem cell transplantation in cold lesion: a novel approach for the investigation of brain trauma and repair.**
Brain Res Brain Res Protoc. 2003 Jul;11(3):145-54.
PMID: 12842219 [PubMed - indexed for MEDLINE]
-  **35:** Wislet-Gendebien S, Leprince P, Moonen G, Rogister B. [Related Articles](#), [Links](#)
-  **Regulation of neural markers nestin and GFAP expression by cultivated bone marrow stromal cells.**
J Cell Sci. 2003 Aug 15;116(Pt 16):3295-302. Epub 2003 Jul 02.
PMID: 12840074 [PubMed - in process]

-  **36:** [Filippov V, Kronenberg G, Pivneva T, Reuter K, Steiner B, Wang LP, Yamaguchi M, Kettenmann H, Kempermann G](#) [Related Articles, Links](#)



Subpopulation of nestin-expressing progenitor cells in the adult murine hippocampus shows electrophysiological and morphological characteristics of astrocytes.

Mol Cell Neurosci. 2003 Jul;23(3):373-82.

PMID: 12837622 [PubMed - indexed for MEDLINE]

-  **37:** [Tonchev AB, Yamashima T, Zhao L, Okano HJ, Okano H](#) [Related Articles, Links](#)



Proliferation of neural and neuronal progenitors after global brain ischemia in young adult macaque monkeys.

Mol Cell Neurosci. 2003 Jun;23(2):292-301.

PMID: 12812760 [PubMed - indexed for MEDLINE]


-  **38:** [Hotta Y, Honda T, Naito M, Kuwano R](#) [Related Articles, Links](#)



Developmental distribution of coxsackie virus and adenovirus receptor localized in the nervous system.

Brain Res Dev Brain Res. 2003 Jun 12;143(1):1-13.

PMID: 12763576 [PubMed - indexed for MEDLINE]


-  **39:** [Fukushima N, Yokouchi K, Kawagishi K, Ren G, Higashiyama F, Moriizumi T](#) [Related Articles, Links](#)



Proliferating cell populations in experimentally-induced hydrocephalus in developing rats.

J Clin Neurosci. 2003 May;10(3):334-7.

PMID: 12763340 [PubMed - in process]


-  **40:** [Murakami T, Fujimoto Y, Yasunaga Y, Ishida O, Tanaka N, Ikuta Y, Ochi M](#) [Related Articles, Links](#)



Transplanted neuronal progenitor cells in a peripheral nerve gap promote nerve repair.

Brain Res. 2003 Jun 6;974(1-2):17-24.

PMID: 12742620 [PubMed - indexed for MEDLINE]


-  **41:** [Ono K, Yoshihara K, Suzuki H, Tanaka KF, Takii T, Onozaki K, Sawada M](#) [Related Articles, Links](#)



Preservation of hematopoietic properties in transplanted bone marrow cells in the brain.

J Neurosci Res. 2003 May 15;72(4):503-7.

PMID: 12704811 [PubMed - indexed for MEDLINE]

-  **42:** [Tonchev AB, Yamashima T, Zhao L, Okano H](#) [Related Articles, Links](#)



Differential proliferative response in the postischemic hippocampus, temporal cortex, and olfactory bulb of young adult macaque monkeys.

Glia. 2003 May;42(3):209-24.

PMID: 12673828 [PubMed - indexed for MEDLINE]


-  **43:** [Duggal N, Iskander S, Hammond RR](#) [Related Articles, Links](#)



MAP2 and nestin co-expression in dysembryoplastic neuroepithelial tumors.

Clin Neuropathol. 2003 Mar-Apr;22(2):57-65.

PMID: 12670051 [PubMed - indexed for MEDLINE]




















-  **44:** [Hao HN, Zhao J, Thomas RL, Parker GC, Lyman WD](#) [Related Articles, Links](#)








































Fetal human hematopoietic stem cells can differentiate sequentially into neural stem cells and then astrocytes in vitro.

J Hematother Stem Cell Res. 2003 Feb;12(1):23-32.


PMID: 12662433 [PubMed - indexed for MEDLINE]


-  **45:** [Shibuya S, Miyamoto O, Itano T, Mori S, Norimatsu H.](#) [Related Articles, Links](#)
 **Temporal progressive antigen expression in radial glia after contusive spinal cord injury in adult rats.**
Glia. 2003 Apr 15;42(2):172-83.
PMID: 12655601 [PubMed - indexed for MEDLINE]
-  **46:** [Liour SS, Yu RK.](#) [Related Articles, Links](#)
 **Differentiation of radial glia-like cells from embryonic stem cells.**
Glia. 2003 Apr 15;42(2):109-17.
PMID: 12655595 [PubMed - indexed for MEDLINE]
-  **47:** [Jori FP, Galderisi U, Piegari E, Cipollaro M, Cascino A, Peluso G, Cotrufo R, Giordano A, Melone MA.](#) [Related Articles, Links](#)
 **EGF-responsive rat neural stem cells: molecular follow-up of neuron and astrocyte differentiation in vitro.**
J Cell Physiol. 2003 May;195(2):220-33.
PMID: 12652649 [PubMed - indexed for MEDLINE]
-  **48:** [Asklund T, Appelskog IB, Ammerpohl O, Langmoen IA, Dilber MS, Aints A, Ekstrom TJ, Almqvist PM.](#) [Related Articles, Links](#)
 **Gap junction-mediated bystander effect in primary cultures of human malignant gliomas with recombinant expression of the HSVtk gene.**
Exp Cell Res. 2003 Apr 1;284(2):185-95.
PMID: 12651152 [PubMed - indexed for MEDLINE]
-  **49:** [Lou S, Gu P, Chen F, He C, Wang M, Lu C.](#) [Related Articles, Links](#)
 **The effect of bone marrow stromal cells on neuronal differentiation of mesencephalic neural stem cells in Sprague-Dawley rats.**
Brain Res. 2003 Apr 4;968(1):114-21.
PMID: 12644269 [PubMed - indexed for MEDLINE]
-  **50:** [Melanson-Drapeau L, Beyko S, Dave S, Hebb AL, Franks DJ, Sellitto C, Paul DL, Bennett SA.](#) [Related Articles, Links](#)
 **Oligodendrocyte progenitor enrichment in the connexin32 null-mutant mouse.**
J Neurosci. 2003 Mar 1;23(5):1759-68.
PMID: 12629180 [PubMed - indexed for MEDLINE]
-  **51:** [Kozlova EN.](#) [Related Articles, Links](#)
 **Differentiation and migration of astrocytes in the spinal cord following dorsal root injury in the adult rat.**
Eur J Neurosci. 2003 Feb;17(4):782-90.
PMID: 12603268 [PubMed - in process]
-  **52:** [Ajo R, Cacicedo L, Navarro C, Sanchez-Franco F.](#) [Related Articles, Links](#)
 **Growth hormone action on proliferation and differentiation of cerebral cortical cells from fetal rat.**
Endocrinology. 2003 Mar;144(3):1086-97.
PMID: 12586785 [PubMed - indexed for MEDLINE]
-  **53:** [Takahashi M, Arai Y, Kurosawa H, Sueyoshi N, Shirai S.](#) [Related Articles, Links](#)
 **Ependymal cell reactions in spinal cord segments after compression injury in adult rat.**
J Neuropathol Exp Neurol. 2003 Feb;62(2):185-94.
PMID: 12578228 [PubMed - indexed for MEDLINE]
-  **54:** [Vicario-Abejon C, Yusta-Boyo MJ, Fernandez-Moreno C, de Pablo F.](#) [Related Articles, Links](#)

-  Locally born olfactory bulb stem cells proliferate in response to insulin-related factors and require endogenous insulin-like growth factor-I for differentiation into neurons and glia.
J Neurosci. 2003 Feb 1;23(3):895-906.
PMID: 12574418 [PubMed - indexed for MEDLINE]
-  **55:** [Kim G, Choe Y, Park J, Cho S, Kim K.](#) [Related Articles, Links](#)
-  Activation of protein kinase A induces neuronal differentiation of HiB5 hippocampal progenitor cells.
Brain Res Mol Brain Res. 2002 Dec 30;109(1-2):134-45.
PMID: 12531523 [PubMed - indexed for MEDLINE]
-  **56:** [Hsieh WY, Hsieh YL, Liu DD, Yang SN, Wu JN.](#) [Related Articles, Links](#)
-  Neural progenitor cells resist excitatory amino acid-induced neurotoxicity.
J Neurosci Res. 2003 Jan 15;71(2):272-8.
PMID: 12503090 [PubMed - indexed for MEDLINE]
-  **57:** [Amano T, Inamura T, Wu CM, Kura S, Nakamizo A, Inoha S, Miyazono M, Ikezaki K.](#) [Related Articles, Links](#)
-  Effects of single low dose irradiation on subventricular zone cells in juvenile rat brain.
Neurol Res. 2002 Dec;24(8):809-16.
PMID: 12500705 [PubMed - indexed for MEDLINE]
-  **58:** [Charytoniuk D, Traiffort E, Hantraye P, Hermel JM, Galdes A, Ruat M.](#) [Related Articles, Links](#)
-  Intraatrial sonic hedgehog injection increases Patched transcript levels in the adult rat subventricular zone.
Eur J Neurosci. 2002 Dec;16(12):2351-7.
PMID: 12492430 [PubMed - indexed for MEDLINE]
-  **59:** [Shi M, Wei LC, Cao R, Chen LW.](#) [Related Articles, Links](#)
-  Enhancement of nestin protein-immunoreactivity induced by ionizing radiation in the forebrain ependymal regions of rats.
Neurosci Res. 2002 Dec;44(4):475-81.
PMID: 12445635 [PubMed - indexed for MEDLINE]
-  **60:** [Cai J, Wu Y, Mirua T, Pierce JL, Lucero MT, Albertine KH, Spangrude GJ, Rao MS.](#) [Related Articles, Links](#)
-  Properties of a fetal multipotent neural stem cell (NEP cell).
Dev Biol. 2002 Nov 15;251(2):221-40.
PMID: 12435354 [PubMed - indexed for MEDLINE]
-  **61:** [Akita J, Takahashi M, Hojo M, Nishida A, Haruta M, Honda Y.](#) [Related Articles, Links](#)
-  Neuronal differentiation of adult rat hippocampus-derived neural stem cells transplanted into embryonic rat explanted retinas with retinoic acid pretreatment.
Brain Res. 2002 Nov 8;954(2):286-93.
PMID: 12414111 [PubMed - indexed for MEDLINE]
-  **62:** [Wei LC, Shi M, Chen LW, Cao R, Zhang P, Chan YS.](#) [Related Articles, Links](#)
-  Nestin-containing cells express glial fibrillary acidic protein in the proliferative regions of central nervous system of postnatal developing and adult mice.
Brain Res Dev Brain Res. 2002 Nov 15;139(1):9-17.
PMID: 12414089 [PubMed - indexed for MEDLINE]
-  **63:** [U HS, Alilain W, Saljooque F.](#) [Related Articles, Links](#)


-  **Fetal brain progenitor cells transdifferentiate to fates outside the nervous system.**
Mol Endocrinol. 2002 Nov;16(11):2645-56.
PMID: 12403852 [PubMed - indexed for MEDLINE]
-  **64:** [Kawasaki H, Kosugi I, Arai Y, Tsutsui Y.](#) [Related Articles, Links](#)
-  **The amount of immature glial cells in organotypic brain slices determines the susceptibility to murine cytomegalovirus infection.**
Lab Invest. 2002 Oct;82(10):1347-58.
PMID: 12379769 [PubMed - indexed for MEDLINE]
-  **65:** [Shibuya S, Miyamoto O, Auer RN, Itano T, Mori S, Norimatsu H.](#) [Related Articles, Links](#)
-  **Embryonic intermediate filament, nestin, expression following traumatic spinal cord injury in adult rats.**
Neuroscience. 2002;114(4):905-16.
PMID: 12379246 [PubMed - indexed for MEDLINE]
-  **66:** [Ha Y, Choi JU, Yoon DH, Cho YE, Kim TS.](#) [Related Articles, Links](#)
-  **Nestin and small heat shock protein expression on reactive astrocytes and endothelial cells in cerebral abscess.**
Neurosci Res. 2002 Oct;44(2):207-12.
PMID: 12354635 [PubMed - indexed for MEDLINE]
-  **67:** [Milosevic A, Goldman JE.](#) [Related Articles, Links](#)
-  **Progenitors in the postnatal cerebellar white matter are antigenically heterogeneous.**
J Comp Neurol. 2002 Oct 14;452(2):192-203.
PMID: 12271492 [PubMed - indexed for MEDLINE]
-  **68:** [Kamitori K, Machide M, Tomita K, Nakafuku M, Kohsaka S.](#) [Related Articles, Links](#)
-  **Cell-type-specific expression of protein tyrosine kinase-related receptor RYK in the central nervous system of the rat.**
Brain Res Mol Brain Res. 2002 Aug 15;104(2):255-66.
PMID: 12225882 [PubMed - indexed for MEDLINE]
-  **69:** [Schumm MA, Castellanos DA, Frydel BR, Sagen J.](#) [Related Articles, Links](#)
-  **Enhanced viability and neuronal differentiation of neural progenitors by chromaffin cell co-culture.**
Brain Res Dev Brain Res. 2002 Aug 30;137(2):115-25.
PMID: 12220703 [PubMed - indexed for MEDLINE]
-  **70:** [Alves JA, Barone P, Engelen S, Froes MM, Menezes JR.](#) [Related Articles, Links](#)
-  **Initial stages of radial glia astrocytic transformation in the early postnatal anterior subventricular zone.**
J Neurobiol. 2002 Sep 5;52(3):251-65.
PMID: 12210108 [PubMed - indexed for MEDLINE]
-  **71:** [Romero-Ramos M, Vourc'h P, Young HE, Lucas PA, Wu Y, Chivatakarn O, Zaman R, Dunkelman N, el-Kalay MA, Chesselet MF.](#) [Related Articles, Links](#)
-  **Neuronal differentiation of stem cells isolated from adult muscle.**
J Neurosci Res. 2002 Sep 15;69(6):894-907.
PMID: 12205682 [PubMed - indexed for MEDLINE]
-  **72:** [Espinosa-Jeffrey A, Becker-Catania SG, Zhao PM, Cole R, Edmond J, de Vellis J.](#) [Related Articles, Links](#)
-  **Selective specification of CNS stem cells into oligodendroglial or neuronal cell lineage: cell culture and transplant studies.**


J Neurosci Res. 2002 Sep 15;69(6):810-25.
PMID: 12205675 [PubMed - indexed for MEDLINE]

-  **73:** [Yagita Y, Kitagawa K, Sasaki T, Miyata T, Okano H, Hori M, Matsumoto M.](#) [Related Articles, Links](#)

 Differential expression of Musashi1 and nestin in the adult rat hippocampus after ischemia.


J Neurosci Res. 2002 Sep 15;69(6):750-6.
PMID: 12205668 [PubMed - indexed for MEDLINE]

-  **74:** [Ignatova TN, Kukekov VG, Laywell ED, Suslov ON, Vronis FD, Steindler DA.](#) [Related Articles, Links](#)

 Human cortical glial tumors contain neural stem-like cells expressing astroglial and neuronal markers in vitro.


Glia. 2002 Sep;39(3):193-206.
PMID: 12203386 [PubMed - indexed for MEDLINE]

-  **75:** [Mizuguchi M, Yamanouchi H, Becker LE, Itoh M, Takashima S.](#) [Related Articles, Links](#)


 Doublecortin immunoreactivity in giant cells of tuberous sclerosis and focal cortical dysplasia.


Acta Neuropathol (Berl). 2002 Oct;104(4):418-24. Epub 2002 Jun 25.
PMID: 12200630 [PubMed - indexed for MEDLINE]

-  **76:** [Liu PC, Lu SD, Huang YL, Sun FY.](#) [Related Articles, Links](#)


 [The expression of nestin in ischemia-injured brain of adult rat]


Sheng Li Xue Bao. 2002 Aug 25;54(4):294-9. Chinese.
PMID: 12195276 [PubMed - in process]

-  **77:** [Sarlomo-Rikala M, Tsujimura T, Lendahl U, Miettinen M.](#) [Related Articles, Links](#)


 Patterns of nestin and other intermediate filament expression distinguish between gastrointestinal stromal tumors, leiomyomas and schwannomas.


APMIS. 2002 Jun;110(6):499-507.
PMID: 12193211 [PubMed - indexed for MEDLINE]

-  **78:** [Kuroda T, Nakamura H, Itoh K, Le WR, Yoshimura S, Takenaka K, Sakai N.](#) [Related Articles, Links](#)


 Nestin immunoreactivity in local neurons of the adult rat striatum after remote cortical injury.


J Chem Neuroanat. 2002 Jul;24(2):137-46.
PMID: 12191730 [PubMed - indexed for MEDLINE]

-  **79:** [Khelifaoui M, Guimiot F, Simonneau M.](#) [Related Articles, Links](#)

 Early neuronal and glial determination from mouse E10.5 telencephalon embryonic stem cells: an in vitro study.


Neuroreport. 2002 Jul 2;13(9):1209-14.
PMID: 12151771 [PubMed - indexed for MEDLINE]

-  **80:** [Zhang X, Li X, Wu J, Wang Z, Xu H, Yang D.](#) [Related Articles, Links](#)


 [Isolation, cultivation and identification of stem cells from cerebral cortex of mouse embryo]


Zhonghua Yi Xue Za Zhi. 2002 Jun 25;82(12):832-5. Chinese.
PMID: 12126533 [PubMed - indexed for MEDLINE]

-  **81:** [Gu H, Wang S, Messam CA, Yao Z.](#) [Related Articles, Links](#)

 Distribution of nestin immunoreactivity in the normal adult human forebrain.


Brain Res. 2002 Jul 12;943(2):174-80.
PMID: 12101039 [PubMed - indexed for MEDLINE]

-  **82:** [Safford KM, Hicok KC, Safford SD, Halvorsen YD, Wilkison WO, Gimble JM, Rice HE](#) [Related Articles, Links](#)


 **Neurogenic differentiation of murine and human adipose-derived stromal cells.**


Biochem Biophys Res Commun. 2002 Jun 7;294(2):371-9.
PMID: 12051722 [PubMed - indexed for MEDLINE]

-  **83:** [Schmidt-Kastner R, Humpel C](#) [Related Articles, Links](#)

 **Nestin expression persists in astrocytes of organotypic slice cultures from rat cortex.**


Int J Dev Neurosci. 2002 Feb;20(1):29-38.
PMID: 12008072 [PubMed - indexed for MEDLINE]

-  **84:** [Poltavtseva RA, Marey MV, Aleksandrova MA, Revishchin AV, Korochkin LI, Sukhikh GT](#) [Related Articles, Links](#)


 **Evaluation of progenitor cell cultures from human embryos for neurotransplantation.**


Brain Res Dev Brain Res. 2002 Mar 31;134(1-2):149-54.
PMID: 11947945 [PubMed - indexed for MEDLINE]

-  **85:** [Englund U, Bjorklund A, Wictorin K](#) [Related Articles, Links](#)

 **Migration patterns and phenotypic differentiation of long-term expanded human neural progenitor cells after transplantation into the adult rat brain.**


Brain Res Dev Brain Res. 2002 Mar 31;134(1-2):123-41.
PMID: 11947943 [PubMed - indexed for MEDLINE]

-  **86:** [Messam CA, Hou J, Berman JW, Major EO](#) [Related Articles, Links](#)

 **Analysis of the temporal expression of nestin in human fetal brain derived neuronal and glial progenitor cells.**


Brain Res Dev Brain Res. 2002 Mar 31;134(1-2):87-92.
PMID: 11947939 [PubMed - indexed for MEDLINE]

-  **87:** [Krum JM, Phillips TM, Rosenstein JM](#) [Related Articles, Links](#)


 **Changes in astroglial GLT-1 expression after neural transplantation or stab wounds.**


Exp Neurol. 2002 Apr;174(2):137-49.
PMID: 11922656 [PubMed - indexed for MEDLINE]

-  **88:** [Kojima A, Tator CH](#) [Related Articles, Links](#)

 **Intrathecal administration of epidermal growth factor and fibroblast growth factor 2 promotes ependymal proliferation and functional recovery after spinal cord injury in adult rats.**


J Neurotrauma. 2002 Feb;19(2):223-38.
PMID: 11893024 [PubMed - indexed for MEDLINE]

-  **89:** [Kotani M, Osanai T, Tajima Y, Kato H, Imada M, Kaneda H, Kubo H, Sakuraba H](#) [Related Articles, Links](#)


 **Identification of neuronal cell lineage-specific molecules in the neuronal differentiation of P19 EC cells and mouse central nervous system.**




















J Neurosci Res. 2002 Mar 1;67(5):595-606.
PMID: 11891772 [PubMed - indexed for MEDLINE]

-  **90:** [Duggal N, Hammond RR](#) [Related Articles, Links](#)


 **Nestin expression in ganglioglioma.**

Exp Neurol. 2002 Mar;174(1):89-95.
PMID: 11869037 [PubMed - indexed for MEDLINE]

-  **91:** [Lemkine GF, Mantero S, Migne C, Raji A, Goula D, Normandie P, Levi G, Demeneix BA](#) [Related Articles, Links](#)

-  **Preferential transfection of adult mouse neural stem cells and their immediate progeny in vivo with polyethylenimine.**
Mol Cell Neurosci. 2002 Feb;19(2):165-74.
PMID: 11860270 [PubMed - indexed for MEDLINE]
-  **92:** Wen PH, Friedrich VL Jr, Shioi J, Robakis NK, Elder GA. [Related Articles, Links](#)
 **Presenilin-1 is expressed in neural progenitor cells in the hippocampus of adult mice.**
Neurosci Lett. 2002 Jan 25;318(2):53-6.
PMID: 11796184 [PubMed - indexed for MEDLINE]
-  **93:** Almqvist PM, Mah R, Lendahl U, Jacobsson B, Henderson G. [Related Articles, Links](#)
 **Immunohistochemical detection of nestin in pediatric brain tumors.**
J Histochem Cytochem. 2002 Feb;50(2):147-58.
PMID: 11799134 [PubMed - indexed for MEDLINE]
-  **94:** Hughes SM, Moussavi-Harami F, Sauter SL, Davidson BL. [Related Articles, Links](#)
 **Viral-mediated gene transfer to mouse primary neural progenitor cells.**
Mol Ther. 2002 Jan;5(1):16-24.
PMID: 11786041 [PubMed - indexed for MEDLINE]
-  **95:** Chen LW, Wei LC, Qiu Y, Liu HL, Rao ZR, Ju G, Chan YS. [Related Articles, Links](#)
 **Significant up-regulation of nestin protein in the neostriatum of MPTP-treated mice. Are the striatal astrocytes regionally activated after systemic MPTP administration?**
Brain Res. 2002 Jan 18;925(1):9-17.
PMID: 11755896 [PubMed - indexed for MEDLINE]
-  **96:** Belot N, Rorive S, Doyen I, Lefranc F, Bruyneel E, Dedeker R, Micik S, Brotschi J, Decaestecker C, Salmon I, Kiss R, Camby I. [Related Articles, Links](#)
 **Molecular characterization of cell substratum attachments in human glial tumors relates to prognostic features.**
Glia. 2001 Dec;36(3):375-90.
PMID: 11746774 [PubMed - indexed for MEDLINE]
-  **97:** Tzeng SF, Bresnahan JC, Beattie MS, de Vellis J. [Related Articles, Links](#)
 **Upregulation of the HLH Id gene family in neural progenitors and glial cells of the rat spinal cord following contusion injury.**
J Neurosci Res. 2001 Dec 15;66(6):1161-72.
PMID: 11746449 [PubMed - indexed for MEDLINE]
-  **98:** Piper DR, Mujtaba T, Keyoung H, Roy NS, Goldman SA, Rao MS, Lucero MT. [Related Articles, Links](#)
 **Identification and characterization of neuronal precursors and their progeny from human fetal tissue.**
J Neurosci Res. 2001 Nov 1;66(3):356-68.
PMID: 11746353 [PubMed - indexed for MEDLINE]
-  **99:** Kernie SG, Erwin TM, Parada LF. [Related Articles, Links](#)
 **Brain remodeling due to neuronal and astrocytic proliferation after controlled cortical injury in mice.**
J Neurosci Res. 2001 Nov 1;66(3):317-26.
PMID: 11746349 [PubMed - indexed for MEDLINE]
-  **100:** Revishchin AV, Poltavtseva RA, Marei MV, Aleksandrova MA, Viktorov IV, Korochkin LI, Sukhikh GT. [Related Articles, Links](#)
 **Structure of cell clusters formed in cultures of dissociated human embryonic brain.**
Bull Exp Biol Med. 2001 Sep;132(3):856-60.

PMID: 11740577 [PubMed - indexed for MEDLINE]

-  **101:** [Darenfed H, Ma X, Davis L, Juge N, Savard PE, Cole GJ, Vincent M.](#) [Related Articles, Links](#)



Molecular polymorphism of the intermediate filament protein translin.
Histochem Cell Biol. 2001 Nov;116(5):397-409. Epub 2001 Oct 09.
PMID: 11735004 [PubMed - indexed for MEDLINE]

-  **102:** [Zhou R, Wu X, Skalli O.](#) [Related Articles, Links](#)



TGF-alpha induces a stationary, radial-glia like phenotype in cultured astrocytes.
Brain Res Bull. 2001 Sep 1;56(1):37-42.
PMID: 11604246 [PubMed - indexed for MEDLINE]

-  **103:** [Okoshi Y, Itoh M, Takashima S.](#) [Related Articles, Links](#)




Characteristic neuropathology and plasticity in periventricular leukomalacia.
Pediatr Neurol. 2001 Sep;25(3):221-6.
PMID: 11587877 [PubMed - indexed for MEDLINE]

-  **104:** [Duggal N, Iskander S, Hammond RR.](#) [Related Articles, Links](#)




Nestin expression in cortical dysplasia.
J Neurosurg. 2001 Sep;95(3):459-65.
PMID: 11565868 [PubMed - indexed for MEDLINE]

-  **105:** [Taylor JP, Sater R, French J, Baltuch G, Crino PB.](#) [Related Articles, Links](#)




Transcription of intermediate filament genes is enhanced in focal cortical dysplasia.
Acta Neuropathol (Berl). 2001 Aug;102(2):141-8.
PMID: 11563628 [PubMed - indexed for MEDLINE]

-  **106:** [Andrae J, Bongcam-Rudloff E, Hansson I, Lendahl U, Westermark B, Nister M.](#) [Related Articles, Links](#)




A 1.8kb GFAP-promoter fragment is active in specific regions of the embryonic CNS.
Mech Dev. 2001 Sep;107(1-2):181-5.
PMID: 11520676 [PubMed - indexed for MEDLINE]

-  **107:** [Hugnot JP, Mellodew K, Pilcher H, Uwanogho D, Price J, Sinden JD.](#) [Related Articles, Links](#)




Direct cell-cell interactions control apoptosis and oligodendrocyte marker expression of neuroepithelial cells.
J Neurosci Res. 2001 Aug 1;65(3):195-207.
PMID: 11494354 [PubMed - indexed for MEDLINE]

-  **108:** [Menet V, Gimenez y Ribotta M, Chauvet N, Drian MJ, Lannoy J, Colucci-Guyon E, Privat A.](#) [Related Articles, Links](#)




Inactivation of the glial fibrillary acidic protein gene, but not that of vimentin, improves neuronal survival and neurite growth by modifying adhesion molecule expression.
J Neurosci. 2001 Aug 15;21(16):6147-58.
PMID: 11487638 [PubMed - indexed for MEDLINE]

-  **109:** [Dai C, Celestino JC, Okada Y, Louis DN, Fuller GN, Holland EC.](#) [Related Articles, Links](#)



PDGF autocrine stimulation dedifferentiates cultured astrocytes and induces oligodendrogliomas and oligoastrocytomas from neural progenitors and astrocytes in vivo.
Genes Dev. 2001 Aug 1;15(15):1913-25.

PMID: 11485986 [PubMed - indexed for MEDLINE]


-  **110:** [Li RY, Baba S, Kosugi I, Arai Y, Kawasaki H, Shinmura Y, Sakakibara SI, Okano H, Tsutsui Y.](#) [Related Articles, Links](#)



Activation of murine cytomegalovirus immediate-early promoter in cerebral ventricular zone and glial progenitor cells in transgenic mice.

Glia. 2001 Jul;35(1):41-52.

PMID: 11424191 [PubMed - indexed for MEDLINE]

-  **111:** [Andrae J, Hansson I, Afink GB, Nister M.](#) [Related Articles, Links](#)



Platelet-derived growth factor receptor-alpha in ventricular zone cells and in developing neurons.

Mol Cell Neurosci. 2001 Jun;17(6):1001-13.

PMID: 11414789 [PubMed - indexed for MEDLINE]

-  **112:** [Vitry S, Avellana-Adalid V, Lachapelle F, Evercooren AB.](#) [Related Articles, Links](#)



Migration and multipotentiality of PSA-NCAM+ neural precursors transplanted in the developing brain.

Mol Cell Neurosci. 2001 Jun;17(6):983-1000.

PMID: 11414788 [PubMed - indexed for MEDLINE]

-  **113:** [Duittoz AH, Hevor T.](#) [Related Articles, Links](#)



Primary culture of neural precursors from the ovine central nervous system (CNS).

J Neurosci Methods. 2001 May 30;107(1-2):131-40.

PMID: 11389950 [PubMed - indexed for MEDLINE]


-  **114:** [Low HP, Savarese TM, Schwartz WJ.](#) [Related Articles, Links](#)



Neural precursor cells form rudimentary tissue-like structures in a rotating-wall vessel bioreactor.

In Vitro Cell Dev Biol Anim. 2001 Mar;37(3):141-7.

PMID: 11370804 [PubMed - indexed for MEDLINE]


-  **115:** [Skogh C, Eriksson C, Kokaia M, Meijer XC, Wahlberg LU, Victorin K, Campbell K.](#) [Related Articles, Links](#)



Generation of regionally specified neurons in expanded glial cultures derived from the mouse and human lateral ganglionic eminence.

Mol Cell Neurosci. 2001 May;17(5):811-20.

PMID: 11358480 [PubMed - indexed for MEDLINE]


-  **116:** [Schwab JM, Beschoner R, Nguyen TD, Meyermann R, Schluesener HJ.](#) [Related Articles, Links](#)



Differential cellular accumulation of connective tissue growth factor defines a subset of reactive astrocytes, invading fibroblasts, and endothelial cells following central nervous system injury in rats and humans.

J Neurotrauma. 2001 Apr;18(4):377-88.

PMID: 11336439 [PubMed - indexed for MEDLINE]


-  **117:** [Magnuson DS, Zhang YP, Cao QL, Han Y, Burke DA, Whittemore SR.](#) [Related Articles, Links](#)






















Embryonic brain precursors transplanted into kainate lesioned rat spinal cord.

Neuroreport. 2001 Apr 17;12(5):1015-9.


PMID: 11303737 [PubMed - indexed for MEDLINE]

-  **118:** [Kokkinakis DM, Watson ML, Honig LS, Rushing EJ, Mickey BE, Schold SC Jr.](#) [Related Articles, Links](#)

Characterization of initiated cells in N-methylnitrosourea-induced

-  **carcinogenesis of the CNS in the adult rat.**
Neuro-oncol. 2001 Apr;3(2):99-112.
PMID: 11296486 [PubMed - indexed for MEDLINE]
-  **119:** [Li Y, Chen J, Chopp M.](#) Related Articles, Links
-  **Adult bone marrow transplantation after stroke in adult rats.**
Cell Transplant. 2001 Jan-Feb;10(1):31-40.
PMID: 11294470 [PubMed - indexed for MEDLINE]
-  **120:** [Schweitzer SC, Klymkowsky MW, Bellin RM, Robson RM, Capetanaki Y, Evans RM.](#) Related Articles, Links
-  **Paranemin and the organization of desmin filament networks.**
J Cell Sci. 2001 Mar;114(Pt 6):1079-89.
PMID: 11228152 [PubMed - indexed for MEDLINE]
-  **121:** [Kalman M, Ajtai BM.](#) Related Articles, Links
-  **A comparison of intermediate filament markers for presumptive astroglia in the developing rat neocortex: immunostaining against nestin reveals more detail, than GFAP or vimentin.**
Int J Dev Neurosci. 2001 Feb;19(1):101-8.
PMID: 11226759 [PubMed - indexed for MEDLINE]
-  **122:** [Cao QL, Zhang YP, Howard RM, Walters WM, Tsoulfas P, Whittemore SR.](#) Related Articles, Links
-  **Pluripotent stem cells engrafted into the normal or lesioned adult rat spinal cord are restricted to a glial lineage.**
Exp Neurol. 2001 Jan;167(1):48-58.
PMID: 11161592 [PubMed - indexed for MEDLINE]
-  **123:** [Nishida A, Takahashi M, Tanihara H, Nakano I, Takahashi JB, Mizoguchi A, Ide C, Honda Y.](#) Related Articles, Links
-  **Incorporation and differentiation of hippocampus-derived neural stem cells transplanted in injured adult rat retina.**
Invest Ophthalmol Vis Sci. 2000 Dec;41(13):4268-74.
PMID: 11095625 [PubMed - indexed for MEDLINE]
-  **124:** [Kosugi I, Shinmura Y, Kawasaki H, Arai Y, Li RY, Baba S, Tsutsui Y.](#) Related Articles, Links
-  **Cytomegalovirus infection of the central nervous system stem cells from mouse embryo: a model for developmental brain disorders induced by cytomegalovirus.**
Lab Invest. 2000 Sep;80(9):1373-83.
PMID: 11005206 [PubMed - indexed for MEDLINE]
-  **125:** [Ajtai BM, Kalman M.](#) Related Articles, Links
-  **Axon growth failure following corpus callosum lesions precedes glial reaction in perinatal rats.**
Anat Embryol (Berl). 2000 Oct;202(4):313-21.
PMID: 11000282 [PubMed - indexed for MEDLINE]
-  **126:** [Behar TN, Schaffner AE, Scott CA, Greene CL, Barker JL.](#) Related Articles, Links
-  **GABA receptor antagonists modulate postmitotic cell migration in slice cultures of embryonic rat cortex.**
Cereb Cortex. 2000 Sep;10(9):899-909.
PMID: 10982750 [PubMed - indexed for MEDLINE]
-  **127:** [Kojima A, Tator CH.](#) Related Articles, Links
-  **Epidermal growth factor and fibroblast growth factor 2 cause proliferation of ependymal precursor cells in the adult rat spinal cord in vivo.**

J Neuropathol Exp Neurol. 2000 Aug;59(8):687-97.
PMID: 10952059 [PubMed - indexed for MEDLINE]

-  **128:** [Menet V, Gimenez Y, Ribotta M, Sandillon F, Privat A.](#)


[Related Articles, Links](#)



GFAP null astrocytes are a favorable substrate for neuronal survival and neurite growth.

Glia. 2000 Sep;31(3):267-72.

PMID: 10941153 [PubMed - indexed for MEDLINE]

-  **129:** [Jacobs JS, Miller MW.](#)


[Related Articles, Links](#)



Cell cycle kinetics and immunohistochemical characterization of dissociated fetal neocortical cultures: evidence that differentiated neurons have mitotic capacity.

Brain Res Dev Brain Res. 2000 Jul 30;122(1):67-80.

PMID: 10915906 [PubMed - indexed for MEDLINE]

-  **130:** [Sanchez-Ramos J, Song S, Cardozo-Pelaez F, Hazzi C, Stedeford T, Willing A, Freeman TB, Saporta S, Janssen W, Patel N, Cooper DR, Sanberg PR.](#)


[Related Articles, Links](#)



Adult bone marrow stromal cells differentiate into neural cells in vitro.

Exp Neurol. 2000 Aug;164(2):247-56.

PMID: 10915564 [PubMed - indexed for MEDLINE]

-  **131:** [Piper DR, Mujtaba T, Rao MS, Luccro MT.](#)


[Related Articles, Links](#)



Immunocytochemical and physiological characterization of a population of cultured human neural precursors.

J Neurophysiol. 2000 Jul;84(1):534-48.

PMID: 10899225 [PubMed - indexed for MEDLINE]

-  **132:** [Palm K, Salin-Nordstrom T, Levesque MF, Neuman T.](#)

[Related Articles, Links](#)



Fetal and adult human CNS stem cells have similar molecular characteristics and developmental potential.

Brain Res Mol Brain Res. 2000 May 31;78(1-2):192-5.

PMID: 10891600 [PubMed - indexed for MEDLINE]

-  **133:** [Rubio FJ, Bueno C, Villa A, Navarro B, Martinez-Serrano A.](#)


[Related Articles, Links](#)



Genetically perpetuated human neural stem cells engraft and differentiate into the adult mammalian brain.

Mol Cell Neurosci. 2000 Jul;16(1):1-13.

PMID: 10882478 [PubMed - indexed for MEDLINE]

-  **134:** [Eriksson C, Ericson C, Gates MA, Wictorin K.](#)


[Related Articles, Links](#)



Long-term, EGF-stimulated cultures of attached GFAP-positive cells derived from the embryonic mouse lateral ganglionic eminence: in vitro and transplantation studies.

Exp Neurol. 2000 Jul;164(1):184-99.

PMID: 10877929 [PubMed - indexed for MEDLINE]

-  **135:** [Kanno H, Saljooque F, Yamamoto I, Hattori S, Yao M, Shuin T, UHS.](#)


[Related Articles, Links](#)



Role of the von Hippel-Lindau tumor suppressor protein during neuronal differentiation.

Cancer Res. 2000 Jun 1;60(11):2820-4.

PMID: 10850421 [PubMed - indexed for MEDLINE]


-  **136:** [Bernier PJ, Vinet J, Cossette M, Parent A.](#)

[Related Articles, Links](#)



Characterization of the subventricular zone of the adult human brain: evidence for the involvement of Bcl-2.

Neurosci Res. 2000 May;37(1):67-78.
PMID: 10802345 [PubMed - indexed for MEDLINE]

-  **137:** [Sultana S, Sernett SW, Bellin RM, Robson RM, Skalli O.](#) [Related Articles, Links](#)



Intermediate filament protein synemin is transiently expressed in a subset of astrocytes during development.

Glia. 2000 Apr;30(2):143-53.
PMID: 10719356 [PubMed - indexed for MEDLINE]

-  **138:** [Lee JA, Cole GJ.](#) [Related Articles, Links](#)



Localization of transitin mRNA, a nestin-like intermediate filament family member, in chicken radial glia processes.


J Comp Neurol. 2000 Mar 20;418(4):473-83.
PMID: 10713574 [PubMed - indexed for MEDLINE]

-  **139:** [Messam CA, Hou J, Major EO.](#) [Related Articles, Links](#)



Coexpression of nestin in neural and glial cells in the developing human CNS defined by a human-specific anti-nestin antibody.

Exp Neurol. 2000 Feb;161(2):585-96.
PMID: 10686078 [PubMed - indexed for MEDLINE]

-  **140:** [Villa A, Snyder EY, Vescovi A, Martinez-Serrano A.](#) [Related Articles, Links](#)



Establishment and properties of a growth factor-dependent, perpetual neural stem cell line from the human CNS.


Exp Neurol. 2000 Jan;161(1):67-84.
PMID: 10683274 [PubMed - indexed for MEDLINE]

-  **141:** [Holland EC.](#) [Related Articles, Links](#)



A mouse model for glioma: biology, pathology, and therapeutic opportunities.

Toxicol Pathol. 2000 Jan-Feb;28(1):171-7.
PMID: 10669005 [PubMed - indexed for MEDLINE]

-  **142:** [Kaneko Y, Sakakibara S, Imai T, Suzuki A, Nakamura Y, Sawamoto K, Ogawa Y, Toyama Y, Miyata T, Okano H.](#) [Related Articles, Links](#)



Musashi1: an evolutionally conserved marker for CNS progenitor cells including neural stem cells.

Dev Neurosci. 2000;22(1-2):139-53.
PMID: 10657706 [PubMed - indexed for MEDLINE]

-  **143:** [Zhou R, Skalli O.](#) [Related Articles, Links](#)



TGF-alpha differentially regulates GFAP, vimentin, and nestin gene expression in U-373 MG glioblastoma cells: correlation with cell shape and motility.

Exp Cell Res. 2000 Feb 1;254(2):269-78.
PMID: 10640425 [PubMed - indexed for MEDLINE]

-  **144:** [Napier A, Yuan A, Cole GJ.](#) [Related Articles, Links](#)



Characterization of the chicken transitin gene reveals a strong relationship to the nestin intermediate filament class.

J Mol Neurosci. 1999 Feb;12(1):11-22.
PMID: 10636467 [PubMed - indexed for MEDLINE]


-  **145:** [Krum JM, Rosenstein JM.](#) [Related Articles, Links](#)




Transient coexpression of nestin, GFAP, and vascular endothelial growth factor in mature reactive astroglia following neural grafting or brain wounds.

Exp Neurol. 1999 Dec;160(2):348-60.


PMID: 10619552 [PubMed - indexed for MEDLINE]


-  **146:** [Rutka JT, Ivanchuk S, Mondal S, Taylor M, Sakai K, Dirks P, Jun P, Jung S, Becker LE, Ackerley C.](#) [Related Articles, Links](#)

 **Co-expression of nestin and vimentin intermediate filaments in invasive human astrocytoma cells.**

Int J Dev Neurosci. 1999 Aug-Oct;17(5-6):503-15.

PMID: 10571412 [PubMed - indexed for MEDLINE]


-  **147:** [Pekny M, Eliasson C, Siushansian R, Ding M, Dixon SJ, Pekna M, Wilson JX, Hamberger A.](#) [Related Articles, Links](#)

 **The impact of genetic removal of GFAP and/or vimentin on glutamine levels and transport of glucose and ascorbate in astrocytes.**

Neurochem Res. 1999 Nov;24(11):1357-62.


PMID: 10555775 [PubMed - indexed for MEDLINE]


-  **148:** [Zhu G, Mehler MF, Zhao J, Yu Yung S, Kessler JA.](#) [Related Articles, Links](#)

 **Sonic hedgehog and BMP2 exert opposing actions on proliferation and differentiation of embryonic neural progenitor cells.**

Dev Biol. 1999 Nov 1;215(1):118-29.


PMID: 10525354 [PubMed - indexed for MEDLINE]


-  **149:** [Sahin Kaya S, Mahmood A, Li Y, Yavuz E, Chopp M.](#) [Related Articles, Links](#)

 **Expression of nestin after traumatic brain injury in rat brain.**

Brain Res. 1999 Sep 4;840(1-2):153-7.


PMID: 10517963 [PubMed - indexed for MEDLINE]


-  **150:** [Pino MV, Valerio MG, Miller GK, Larson JL, Rosolia DL, Jayyosi Z, Crouch CN, Trojanowski JQ, Geiger LE.](#) [Related Articles, Links](#)

 **Toxicologic and carcinogenic effects of the type IV phosphodiesterase inhibitor RP 73401 on the nasal olfactory tissue in rats.**

Toxicol Pathol. 1999 Jul-Aug;27(4):383-94.


PMID: 10485818 [PubMed - indexed for MEDLINE]


-  **151:** [Quinn SM, Walters WM, Vescovi AL, Whitemore SR.](#) [Related Articles, Links](#)

 **Lineage restriction of neuroepithelial precursor cells from fetal human spinal cord.**

J Neurosci Res. 1999 Sep 1;57(5):590-602.

PMID: 10462684 [PubMed - indexed for MEDLINE]


-  **152:** [Eliasson C, Sahlgren C, Berthold CH, Stakeberg J, Celis JE, Betsholtz C, Eriksson JE, Pekny M.](#) [Related Articles, Links](#)

 **Intermediate filament protein partnership in astrocytes.**

J Biol Chem. 1999 Aug 20;274(34):23996-4006.

PMID: 10446168 [PubMed - indexed for MEDLINE]


-  **153:** [Jaworski DM, Kelly GM, Hockfield S.](#) [Related Articles, Links](#)

 **Intracranial injury acutely induces the expression of the secreted isoform of the CNS-specific hyaluronan-binding protein BEHAB/brevican.**

Exp Neurol. 1999 Jun;157(2):327-37.


PMID: 10364444 [PubMed - indexed for MEDLINE]











-  **154:** [Namiki J, Tator CH.](#) [Related Articles, Links](#)

 **Cell proliferation and nestin expression in the ependyma of the adult rat spinal cord after injury.**


J Neuropathol Exp Neurol. 1999 May;58(5):489-98.

PMID: 10331437 [PubMed - indexed for MEDLINE]

-  **155:** [Kukekov VG, Laywell ED, Suslov O, Davies K, Scheffler B, Thomas LB, O'Brien TF, Kusakabe M, Steindler DA.](#) [Related Articles, Links](#)

-  **Multipotent stem/progenitor cells with similar properties arise from two neurogenic regions of adult human brain.**
Exp Neurol. 1999 Apr;156(2):333-44.
PMID: 10328940 [PubMed - indexed for MEDLINE]
- ☐ **156:** Brook GA, Perez-Bouza A, Noth J, Nacimiento W. [Related Articles](#), [Links](#)
-  **Astrocytes re-express nestin in deafferented target territories of the adult rat hippocampus.**
Neuroreport. 1999 Apr 6;10(5):1007-11.
PMID: 10321476 [PubMed - indexed for MEDLINE]
- ☐ **157:** Pekny M, Johansson CB, Eliasson C, Stakeberg J, Wallen A, Perlmann T, Lendahl U, Betsholtz C, Berthold CH, Frisen J. [Related Articles](#), [Links](#)
-  **Abnormal reaction to central nervous system injury in mice lacking glial fibrillary acidic protein and vimentin.**
J Cell Biol. 1999 May 3;145(3):503-14.
PMID: 10225952 [PubMed - indexed for MEDLINE]
- ☐ **158:** Domercq M, Matute C. [Related Articles](#), [Links](#)
-  **Expression of glutamate transporters in the adult bovine corpus callosum.**
Brain Res Mol Brain Res. 1999 Apr 20;67(2):296-302.
PMID: 10216228 [PubMed - indexed for MEDLINE]
- ☐ **159:** Messing A. [Related Articles](#), [Links](#)
-  **Nestin in the liver--lessons from the brain.**
Hepatology. 1999 Feb;29(2):602-3. No abstract available.
PMID: 9918942 [PubMed - indexed for MEDLINE]
- ☐ **160:** Niki T, Pekny M, Hellemans K, Bleser PD, Berg KV, Vaeyens F, Quartier E, Schuit F, Geerts A. [Related Articles](#), [Links](#)
-  **Class VI intermediate filament protein nestin is induced during activation of rat hepatic stellate cells.**
Hepatology. 1999 Feb;29(2):520-7.
PMID: 9918930 [PubMed - indexed for MEDLINE]
- ☐ **161:** Ljungberg MC, Stern G, Wilkin GP. [Related Articles](#), [Links](#)
-  **Survival of genetically engineered, adult-derived rat astrocytes grafted into the 6-hydroxydopamine lesioned adult rat striatum.**
Brain Res. 1999 Jan 16;816(1):29-37.
PMID: 9878682 [PubMed - indexed for MEDLINE]
- ☐ **162:** Holland EC, Hively WP, DePinho RA, Varmus HE. [Related Articles](#), [Links](#)
-  **A constitutively active epidermal growth factor receptor cooperates with disruption of G1 cell-cycle arrest pathways to induce glioma-like lesions in mice.**
Genes Dev. 1998 Dec 1;12(23):3675-85.
PMID: 9851974 [PubMed - indexed for MEDLINE]
- ☐ **163:** Zhou FC, Chiang YH. [Related Articles](#), [Links](#)
-  **Long-term nonpassaged EGF-responsive neural precursor cells are stem cells.**
Wound Repair Regen. 1998 Jul-Aug;6(4):337-48.
PMID: 9824552 [PubMed - indexed for MEDLINE]
- ☐ **164:** Ali SA, Pappas IS, Parnavelas JG. [Related Articles](#), [Links](#)
-  **Collagen type IV promotes the differentiation of neuronal progenitors and inhibits astroglial differentiation in cortical cell cultures.**
Brain Res Dev Brain Res. 1998 Sep 10;110(1):31-8.

PMID: 9733911 [PubMed - indexed for MEDLINE]

-  **165:** Winkler C, Fricker RA, Gates MA, Olsson M, Hammang JP, Carpenter MK, Bjorklund A. [Related Articles, Links](#)



Incorporation and glial differentiation of mouse EGF-responsive neural progenitor cells after transplantation into the embryonic rat brain.

Mol Cell Neurosci. 1998 Jun;11(3):99-116.

PMID: 9647689 [PubMed - indexed for MEDLINE]


-  **166:** Scherer SE, Gallo V. [Related Articles, Links](#)



Expression and regulation of kainate and AMPA receptors in the rat neural tube.

J Neurosci Res. 1998 May 1;52(3):356-68.

PMID: 9590444 [PubMed - indexed for MEDLINE]

-  **167:** Pekny M, Eliasson C, Chien CL, Kindblom LG, Liem R, Hamberger A, Betsholtz C. [Related Articles, Links](#)



GFAP-deficient astrocytes are capable of stellation in vitro when cocultured with neurons and exhibit a reduced amount of intermediate filaments and an increased cell saturation density.

Exp Cell Res. 1998 Mar 15;239(2):332-43.

PMID: 9521851 [PubMed - indexed for MEDLINE]


-  **168:** Murray K, Dubois-Dalcq M. [Related Articles, Links](#)



Emergence of oligodendrocytes from human neural spheres.

J Neurosci Res. 1997 Oct 15;50(2):146-56.

PMID: 9373025 [PubMed - indexed for MEDLINE]


-  **169:** Hemken PM, Bellin RM, Sernett SW, Becker B, Huiatt TW, Robson RM. [Related Articles, Links](#)



Molecular characteristics of the novel intermediate filament protein paranemin. Sequence reveals EAP-300 and IFAPa-400 are highly homologous to paranemin.

J Biol Chem. 1997 Dec 19;272(51):32489-99.

PMID: 9405460 [PubMed - indexed for MEDLINE]

-  **170:** Liedtke W, Edelman W, Chiu FC, Kucherlapati R, Raine CS. [Related Articles, Links](#)



Experimental autoimmune encephalomyelitis in mice lacking glial fibrillary acidic protein is characterized by a more severe clinical course and an infiltrative central nervous system lesion.

Am J Pathol. 1998 Jan;152(1):251-9.

PMID: 9422542 [PubMed - indexed for MEDLINE]


-  **171:** Fanarraga ML, Milward EA. [Related Articles, Links](#)



Characterization of a putative novel type of oligodendrocyte in cultures from rat spinal cord.

Eur J Neurosci. 1997 Oct;9(10):2213-7.

PMID: 9421182 [PubMed - indexed for MEDLINE]

-  **172:** Kukekov VG, Laywell ED, Thomas LB, Steindler DA. [Related Articles, Links](#)



A nestin-negative precursor cell from the adult mouse brain gives rise to neurons and glia.

Glia. 1997 Dec;21(4):399-407.


PMID: 9419015 [PubMed - indexed for MEDLINE]

-  **173:** Meltzer H, Hatton JD, Sang U H. [Related Articles, Links](#)



Cell type-specific development of rodent central nervous system progenitor cells in culture.

J Neurosurg. 1998 Jan;88(1):93-8.
PMID: 9420078 [PubMed - indexed for MEDLINE]

-  **174:** [Hulspas R, Tiarks C, Reilly J, Hsieh CC, Recht L, Quesenberry PJ](#) [Related Articles, Links](#)




In vitro cell density-dependent clonal growth of EGF-responsive murine neural progenitor cells under serum-free conditions.
Exp Neurol. 1997 Nov;148(1):147-56.
PMID: 9398457 [PubMed - indexed for MEDLINE]

-  **175:** [Yuan Y, Lee JA, Napier A, Cole GJ](#) [Related Articles, Links](#)




Molecular cloning of a new intermediate filament protein expressed by radial glia and demonstration of alternative splicing in a novel heptad repeat region located in the carboxy-terminal tail domain.
Mol Cell Neurosci. 1997;10(1-2):71-86.
PMID: 9361289 [PubMed - indexed for MEDLINE]

-  **176:** [Miyaguchi K](#) [Related Articles, Links](#)




Ultrastructure of intermediate filaments of nestin- and vimentin-immunoreactive astrocytes in organotypic slice cultures of hippocampus.
J Struct Biol. 1997 Oct;120(1):61-8.
PMID: 9356292 [PubMed - indexed for MEDLINE]

-  **177:** [Lavdas AA, Blue ME, Lincoln J, Parnavelas JG](#) [Related Articles, Links](#)



Serotonin promotes the differentiation of glutamate neurons in organotypic slice cultures of the developing cerebral cortex.
J Neurosci. 1997 Oct 15;17(20):7872-80.
PMID: 9315907 [PubMed - indexed for MEDLINE]

-  **178:** [Yamanouchi H, Jay V, Rutka JT, Takashima S, Becker LE](#) [Related Articles, Links](#)




Evidence of abnormal differentiation in giant cells of tuberous sclerosis.
Pediatr Neurol. 1997 Jul;17(1):49-53.
PMID: 9308976 [PubMed - indexed for MEDLINE]

-  **179:** [Maleski M, Hockfield S](#) [Related Articles, Links](#)




Glial cells assemble hyaluronan-based pericellular matrices in vitro.
Glia. 1997 Jul;20(3):193-202.
PMID: 9215728 [PubMed - indexed for MEDLINE]

-  **180:** [Shinohara C, Gobbel GT, Lamborn KR, Tada E, Fike JR](#) [Related Articles, Links](#)




Apoptosis in the subependyma of young adult rats after single and fractionated doses of X-rays.
Cancer Res. 1997 Jul 1;57(13):2694-702.
PMID: 9205079 [PubMed - indexed for MEDLINE]

-  **181:** [Doetsch F, Garcia-Verdugo JM, Alvarez-Buylla A](#) [Related Articles, Links](#)























Cellular composition and three-dimensional organization of the subventricular germinal zone in the adult mammalian brain.
J Neurosci. 1997 Jul 1;17(13):5046-61.
PMID: 9185542 [PubMed - indexed for MEDLINE]




















-  **182:** [Kalyani A, Hobson K, Rao MS](#) [Related Articles, Links](#)






















Neuroepithelial stem cells from the embryonic spinal cord: isolation, characterization, and clonal analysis.
Dev Biol. 1997 Jun 15;186(2):202-23.
PMID: 9205140 [PubMed - indexed for MEDLINE]


-  **183:** [Lundberg C, Martinez-Serrano A, Cattaneo E, McKay RD, Bjorklund A](#) [Related Articles, Links](#)

-  Survival, integration, and differentiation of neural stem cell lines after transplantation to the adult rat striatum.
Exp Neurol. 1997 Jun;145(2 Pt 1):342-60.
PMID: 9217071 [PubMed - indexed for MEDLINE]
-  **184:** [Cavanagh JF, Mione MC, Pappas IS, Parnavelas JG.](#) [Related Articles, Links](#)
-  Basic fibroblast growth factor prolongs the proliferation of rat cortical progenitor cells in vitro without altering their cell cycle parameters.
Cereb Cortex. 1997 Jun;7(4):293-302.
PMID: 9177761 [PubMed - indexed for MEDLINE]
-  **185:** [Levison SW, Goldman JE.](#) [Related Articles, Links](#)
-  Multipotential and lineage restricted precursors coexist in the mammalian perinatal subventricular zone.
J Neurosci Res. 1997 Apr 15;48(2):83-94.
PMID: 9130137 [PubMed - indexed for MEDLINE]
-  **186:** [Seidman KJ, Teng AL, Rosenkopf R, Spilotro P, Weyhenmeyer JA.](#) [Related Articles, Links](#)
-  Isolation, cloning and characterization of a putative type-1 astrocyte cell line.
Brain Res. 1997 Apr 4;753(1):18-26.
PMID: 9125427 [PubMed - indexed for MEDLINE]
-  **187:** [Rosser AE, Tyers P, ter Borg M, Dunnett SB, Svendsen CN.](#) [Related Articles, Links](#)
-  Co-expression of MAP-2 and GFAP in cells developing from rat EGF responsive precursor cells.
Brain Res Dev Brain Res. 1997 Feb 20;98(2):291-5.
PMID: 9051273 [PubMed - indexed for MEDLINE]
-  **188:** [Takano T, Becker LE.](#) [Related Articles, Links](#)
-  Developmental change of the nestin-immunoreactive midline raphe glial structure in human brainstem and spinal cord.
Dev Neurosci. 1997;19(2):202-9.
PMID: 9097036 [PubMed - indexed for MEDLINE]
-  **189:** [Holmin S, Almqvist P, Lendahl U, Mathiesen T.](#) [Related Articles, Links](#)
-  Adult nestin-expressing subependymal cells differentiate to astrocytes in response to brain injury.
Eur J Neurosci. 1997 Jan;9(1):65-75.
PMID: 9042570 [PubMed - indexed for MEDLINE]
-  **190:** [Ho CL, Liem RK.](#) [Related Articles, Links](#)
-  Intermediate filaments in the nervous system: implications in cancer.
Cancer Metastasis Rev. 1996 Dec;15(4):483-97. Review.
PMID: 9034605 [PubMed - indexed for MEDLINE]
-  **191:** [Levison SW, Ducceschi MH, Young GM, Wood TL.](#) [Related Articles, Links](#)
-  Acute exposure to CNTF in vivo induces multiple components of reactive gliosis.
Exp Neurol. 1996 Oct;141(2):256-68.
PMID: 8812159 [PubMed - indexed for MEDLINE]
-  **192:** [Schinstine M, Iacovitti L.](#) [Related Articles, Links](#)
-  Expression of neuronal antigens by astrocytes derived from EGF-generated neuroprogenitor cells.
Exp Neurol. 1996 Sep;141(1):67-78.
PMID: 8797669 [PubMed - indexed for MEDLINE]

-  **193:** [Takano T, Rutka JT, Becker LE.](#) [Related Articles, Links](#)
-  **Overexpression of nestin and vimentin in ependymal cells in hydrocephalus.**
Acta Neuropathol (Berl). 1996 Jul;92(1):90-7.
PMID: 8811130 [PubMed - indexed for MEDLINE]
-  **194:** [Hasgekar N, Saranath D, Seshadri R, Krishnaveni L, Ghosh S, Lalitha VS.](#) [Related Articles, Links](#)
-  **A neural precursor cell line derived from murine teratocarcinoma.**
Int J Dev Biol. 1996 Jun;40(3):591-7.
PMID: 8840191 [PubMed - indexed for MEDLINE]
-  **195:** [Adams FS, La Rosa FG, Kumar S, Edwards-Prasad J, Kentroti S, Vernadakis A, Freed CR, Prasad KN.](#) [Related Articles, Links](#)
-  **Characterization and transplantation of two neuronal cell lines with dopaminergic properties.**
Neurochem Res. 1996 May;21(5):619-27.
PMID: 8726972 [PubMed - indexed for MEDLINE]
-  **196:** [Gensert JM, Goldman JE.](#) [Related Articles, Links](#)
-  **In vivo characterization of endogenous proliferating cells in adult rat subcortical white matter.**
Glia. 1996 May;17(1):39-51.
PMID: 8723841 [PubMed - indexed for MEDLINE]
-  **197:** [Thomas LB, Gates MA, Steindler DA.](#) [Related Articles, Links](#)
-  **Young neurons from the adult subependymal zone proliferate and migrate along an astrocyte, extracellular matrix-rich pathway.**
Glia. 1996 May;17(1):1-14.
PMID: 8723838 [PubMed - indexed for MEDLINE]
-  **198:** [Levin RJ, Bradley MK.](#) [Related Articles, Links](#)
-  **Neuroectodermal antigens persist in benign and malignant salivary gland tumor cultures.**
Arch Otolaryngol Head Neck Surg. 1996 May;122(5):551-7; discussion 557-8.
PMID: 8615974 [PubMed - indexed for MEDLINE]
-  **199:** [Chiang YH, Silani V, Zhou FC.](#) [Related Articles, Links](#)
-  **Morphological differentiation of astroglial progenitor cells from EGF-responsive neurospheres in response to fetal calf serum, basic fibroblast growth factor, and retinol.**
Cell Transplant. 1996 Mar-Apr;5(2):179-89.
PMID: 8689030 [PubMed - indexed for MEDLINE]
-  **200:** [Frederiksen K, Thorpe A, Richards SJ, Waters J, Dunnett SB, Sandberg BE.](#) [Related Articles, Links](#)
-  **Immortalized neural cells from trisomy 16 mice as models for Alzheimer's disease.**
Ann N Y Acad Sci. 1996 Jan 17;777:415-20.
PMID: 8624123 [PubMed - indexed for MEDLINE]
-  **201:** [Zerlin M, Levison SW, Goldman JE.](#) [Related Articles, Links](#)
-  **Early patterns of migration, morphogenesis, and intermediate filament expression of subventricular zone cells in the postnatal rat forebrain.**
J Neurosci. 1995 Nov;15(11):7238-49.
PMID: 7472478 [PubMed - indexed for MEDLINE]
-  **202:** [Gates MA, Thomas LB, Howard EM, Laywell ED, Sajin B, Faissner A, Gotz B, Silver J, Steindler DA.](#) [Related Articles, Links](#)

-  **Cell and molecular analysis of the developing and adult mouse subventricular zone of the cerebral hemispheres.**
J Comp Neurol. 1995 Oct 16;361(2):249-66.
PMID: 8543661 [PubMed - indexed for MEDLINE]
-  **203:** [Santa-Olalla J, Covarrubias L.](#) [Related Articles, Links](#)
-  **Epidermal growth factor (EGF), transforming growth factor-alpha (TGF-alpha), and basic fibroblast growth factor (bFGF) differentially influence neural precursor cells of mouse embryonic mesencephalon.**
J Neurosci Res. 1995 Oct 1;42(2):172-83. Erratum in: J Neurosci Res 1995 Dec 15;42(6):855.
PMID: 8568917 [PubMed - indexed for MEDLINE]
-  **204:** [Fraichard A, Chassande O, Bilbaut G, Dehay C, Savatier P, Samarut J.](#) [Related Articles, Links](#)
-  **In vitro differentiation of embryonic stem cells into glial cells and functional neurons.**
J Cell Sci. 1995 Oct;108 (Pt 10):3181-8.
PMID: 7593279 [PubMed - indexed for MEDLINE]
-  **205:** [Duprey P, Paulin D.](#) [Related Articles, Links](#)
-  **What can be learned from intermediate filament gene regulation in the mouse embryo.**
Int J Dev Biol. 1995 Jun;39(3):443-57. Review.
PMID: 7577435 [PubMed - indexed for MEDLINE]
-  **206:** [Lin RC, Matesic DF, Marvin M, McKay RD, Brustle O.](#) [Related Articles, Links](#)
-  **Re-expression of the intermediate filament nestin in reactive astrocytes.**
Neurobiol Dis. 1995 Apr;2(2):79-85.
PMID: 8980011 [PubMed - indexed for MEDLINE]
-  **207:** [Kashima T, Vinters HV, Campagnoni AT.](#) [Related Articles, Links](#)
-  **Unexpected expression of intermediate filament protein genes in human oligodendroglioma cell lines.**
J Neuropathol Exp Neurol. 1995 Jan;54(1):23-31.
PMID: 7529297 [PubMed - indexed for MEDLINE]
-  **208:** [Clarke SR, Shetty AK, Bradley JL, Turner DA.](#) [Related Articles, Links](#)
-  **Reactive astrocytes express the embryonic intermediate neurofilament nestin.**
Neuroreport. 1994 Oct 3;5(15):1885-8.
PMID: 7841369 [PubMed - indexed for MEDLINE]
-  **209:** [Loo DT, Althoen MC, Cotman CW.](#) [Related Articles, Links](#)
-  **Down regulation of nestin by TGF-beta or serum in SFME cells accompanies differentiation into astrocytes.**
Neuroreport. 1994 Aug 15;5(13):1585-8.
PMID: 7529590 [PubMed - indexed for MEDLINE]
-  **210:** [Yachnis AT, Rorke LB, Lee VM, Trojanowski JQ.](#) [Related Articles, Links](#)
-  **Expression of neuronal and glial polypeptides during histogenesis of the human cerebellar cortex including observations on the dentate nucleus.**
J Comp Neurol. 1993 Aug 15;334(3):356-69.
PMID: 7690783 [PubMed - indexed for MEDLINE]
-  **211:** [Dahlstrand J, Collins VP, Lendahl U.](#) [Related Articles, Links](#)
-  **Expression of the class VI intermediate filament nestin in human central nervous system tumors.**

Cancer Res. 1992 Oct 1;52(19):5334-41.
PMID: 1382841 [PubMed - indexed for MEDLINE]


 **212:** [Reynolds BA, Weiss S.](#)

[Related Articles, Links](#)



Generation of neurons and astrocytes from isolated cells of the adult mammalian central nervous system.

Science. 1992 Mar 27;255(5052):1707-10.
PMID: 1553558 [PubMed - indexed for MEDLINE]

 **213:** [Redies C, Lendahl U, McKay RD.](#)

[Related Articles, Links](#)



Differentiation and heterogeneity in T-antigen immortalized precursor cell lines from mouse cerebellum.

J Neurosci Res. 1991 Dec;30(4):601-15.
PMID: 1724017 [PubMed - indexed for MEDLINE]

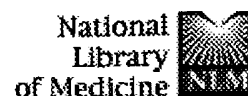
Display **Summary** Show: **500** Sort **Send to** **Text**

Items 1-213 of 213

One page.

[Write to the Help Desk](#)
[NCBI](#) | [NLM](#) | [NIH](#)
[Department of Health & Human Services](#)
[Freedom of Information Act](#) | [Disclaimer](#)

Mar 2 2004 16:02:50



Entrez PubMed Nucleotide Protein Genome Structure OMIM PMC Journals Books

Search PubMed for nestin AND neuron Go Clear

Limits Preview/Index History Clipboard Details

About Entrez

Display Summary Show: 500 Sort Send to Text

Items 1-362 of 362

One page.

Text Version

Entrez PubMed

Overview
Help | FAQ
Tutorial
New/Noteworthy
E-Utilities

PubMed Services

Journals Database
MeSH Database
Single Citation Matcher
Batch Citation Matcher
Clinical Queries
LinkOut
Cubby

Related Resources

Order Documents
NLM Gateway
TOXNET
Consumer Health
Clinical Alerts
ClinicalTrials.gov
PubMed Central

Privacy Policy

☐ 1: [Dong XX, Liu JB, Dong YX.](#)[Related Articles, Links](#)**[Experimental study on effect of gastrodia in inducing the differentiation of mesenchymal stem cells into neuron-like cells]**

Zhongguo Zhong Xi Yi Jie He Za Zhi. 2004 Jan;24(1):51-4. Chinese.
PMID: 14976891 [PubMed - in process]

☐ 2: [Wang YH, Liu YJ, Lu HL, Liu ZH, Jiang XD, Xu RX, Zhou ZJ, Zou YX, Chen YZ.](#)[Related Articles, Links](#)**In vitro culture and induced differentiation of adult rat neural stem cells from the corpus striatum.**

Di Yi Jun Yi Da Xue Xue Bao. 2004 Feb;24(2):192-4.
PMID: 14965825 [PubMed - in process]

☐ 3: [Jang YK, Park JJ, Lee MC, Yoon BH, Yang YS, Yang SE, Kim SU.](#)[Related Articles, Links](#)**Retinoic acid-mediated induction of neurons and glial cells from human umbilical cord-derived hematopoietic stem cells.**

J Neurosci Res. 2004 Feb 15;75(4):573-84.
PMID: 14743441 [PubMed - in process]

☐ 4: [Yamada J, Kuramochi Y, Takagi M, Suga T.](#)[Related Articles, Links](#)**Expression of acyl-CoA hydrolase in the developing mouse brain.**

Neurosci Lett. 2004 Jan 23;355(1-2):89-92.
PMID: 14729242 [PubMed - in process]

☐ 5: [Zhang H, Wang JZ, Sun HY, Zhang JN, Yang SY.](#)[Related Articles, Links](#)**The effects of GM1 and bFGF synergistically inducing adult rat bone marrow stromal cells to form neural progenitor cells and their differentiation.**

Chin J Traumatol. 2004 Feb;7(1):3-6.
PMID: 14728810 [PubMed - in process]

☐ 6: [Horio Y, Hisahara S, Sakamoto J.](#)[Related Articles, Links](#)**[Functional analysis of SIR2]**


Nippon Yakurigaku Zasshi. 2003 Nov;122 Suppl:30P-32P. Japanese.
PMID: 14727515 [PubMed - indexed for MEDLINE]


☐ 7: [Moreno-Lopez B, Romero-Grimaldi C, Noval JA, Murillo-Carretero M, Matarredona ER, Estrada C.](#)[Related Articles, Links](#)**Nitric oxide is a physiological inhibitor of neurogenesis in the adult mouse subventricular zone and olfactory bulb.**


J Neurosci. 2004 Jan 7;24(1):85-95.
PMID: 14715941 [PubMed - indexed for MEDLINE]


☐ 8: [Shi Y, Chichung Lie D, Taupin P, Nakashima K, Ray J, Yu RT, Gage FH, Evans RM.](#)[Related Articles, Links](#)**Expression and function of orphan nuclear receptor TLX in adult neural stem cells.**


Nature. 2004 Jan 1;427(6969):78-83.
PMID: 14702088 [PubMed - indexed for MEDLINE]


-  **9:** [Calza L, Fernandez M, Giuliani A, Pironi S, D'Intino G, Manservigi M, De Sordi N, Giardino L.](#) [Related Articles, Links](#)


 **Stem cells and nervous tissue repair: from in vitro to in vivo.**
Prog Brain Res. 2004;146:75-91.
PMID: 14699957 [PubMed - indexed for MEDLINE]


-  **10:** [Schumm MA, Castellanos DA, Frydel BR, Sagen J.](#) [Related Articles, Links](#)

 **Improved neural progenitor cell survival when cogenerated with chromaffin cells in the rat striatum.**
Exp Neurol. 2004 Jan;185(1):133-42.
PMID: 14697324 [PubMed - indexed for MEDLINE]


-  **11:** [Kim JH, Panchision D, Kittappa R, McKay R.](#) [Related Articles, Links](#)


 **Generating CNS neurons from embryonic, fetal, and adult stem cells.**
Methods Enzymol. 2003;365:303-27. No abstract available.
PMID: 14696355 [PubMed - indexed for MEDLINE]


-  **12:** [Williams BP, Milligan CJ, Street M, Hornby FM, Deuchars J, Buckley NJ.](#) [Related Articles, Links](#)


 **Transcription of the M1 muscarinic receptor gene in neurons and neuronal progenitors of the embryonic rat forebrain.**
J Neurochem. 2004 Jan;88(1):70-7.
PMID: 14675151 [PubMed - indexed for MEDLINE]


-  **13:** [Scemes E, Duval N, Meda P.](#) [Related Articles, Links](#)


 **Reduced expression of P2Y1 receptors in connexin43-null mice alters calcium signaling and migration of neural progenitor cells.**
J Neurosci. 2003 Dec 10;23(36):11444-52. Erratum in: J Neurosci. 2004 Jan 7;24(1):302.
PMID: 14673009 [PubMed - indexed for MEDLINE]


-  **14:** [Liu PC, Yang ZJ, Qiu MH, Zhang LM, Sun FY.](#) [Related Articles, Links](#)


 **Induction of CRMP-4 in striatum of adult rat after transient brain ischemia.**
Acta Pharmacol Sin. 2003 Dec;24(12):1205-11.
PMID: 14653945 [PubMed - in process]


-  **15:** [Schwartz PH, Bryant PJ, Fuja TJ, Su H, O'Dowd DK, Klassen H.](#) [Related Articles, Links](#)


 **Isolation and characterization of neural progenitor cells from post-mortem human cortex.**
J Neurosci Res. 2003 Dec 15;74(6):838-51.
PMID: 14648588 [PubMed - indexed for MEDLINE]


-  **16:** [Yokoyama A, Yang L, Itoh S, Mori K, Tanaka J.](#) [Related Articles, Links](#)

 **Microglia, a potential source of neurons, astrocytes, and oligodendrocytes.**
Glia. 2004 Jan 1;45(1):96-104.
PMID: 14648550 [PubMed - indexed for MEDLINE]


-  **17:** [Schumm MA, Castellanos DA, Frydel BR, Sagen J.](#) [Related Articles, Links](#)


 **Direct cell-cell contact required for neurotrophic effect of chromaffin cells on neural progenitor cells.**
Brain Res Dev Brain Res. 2003 Dec 19;146(1-2):1-13.
PMID: 14643006 [PubMed - indexed for MEDLINE]

-  **18:** [Enzmann V, Howard RM, Yamauchi Y, Whittemore SR, Kaplan HJ.](#) [Related Articles, Links](#)


 **Enhanced induction of RPE lineage markers in pluripotent neural stem cells engrafted into the adult rat subretinal space.**


Invest Ophthalmol Vis Sci. 2003 Dec;44(12):5417-22.
PMID: 14638746 [PubMed - indexed for MEDLINE]


-  **19:** [Vitry S, Bertrand JY, Cumano A, Dubois-Dalcq M.](#) [Related Articles, Links](#)

 **Primordial hematopoietic stem cells generate microglia but not myelin-forming cells in a neural environment.**
J Neurosci. 2003 Nov 19;23(33):10724-31.
PMID: 14627658 [PubMed - indexed for MEDLINE]


-  **20:** [Mizuno Y, Takeuchi T, Takatama M, Okamoto K.](#) [Related Articles, Links](#)


 **Expression of nestin in Purkinje cells in patients with Creutzfeldt-Jakob disease.**
Neurosci Lett. 2003 Dec 4;352(2):109-12.
PMID: 14625035 [PubMed - indexed for MEDLINE]


-  **21:** [Kronenberg G, Reuter K, Steiner B, Brandt MD, Jessberger S, Yamaguchi M, Kempermann G.](#) [Related Articles, Links](#)

 **Subpopulations of proliferating cells of the adult hippocampus respond differently to physiologic neurogenic stimuli.**
J Comp Neurol. 2003 Dec 22;467(4):455-63.
PMID: 14624480 [PubMed - indexed for MEDLINE]


-  **22:** [Ichinohe N, Yoshihara Y, Hashikawa T, Rockland KS.](#) [Related Articles, Links](#)


 **Developmental study of dendritic bundles in layer 1 of the rat granular retrosplenial cortex with special reference to a cell adhesion molecule, OCAM.**
Eur J Neurosci. 2003 Oct;18(7):1764-74.
PMID: 14622211 [PubMed - indexed for MEDLINE]


-  **23:** [Gozal D, Row BW, Gozal E, Kheirandish L, Neville JJ, Brittan KR, Sachleben LR Jr, Guo SZ.](#) [Related Articles, Links](#)


 **Temporal aspects of spatial task performance during intermittent hypoxia in the rat: evidence for neurogenesis.**
Eur J Neurosci. 2003 Oct;18(8):2335-42.
PMID: 14622195 [PubMed - indexed for MEDLINE]


-  **24:** [Ratajczak MZ, Kucia M, Rea R, Majka M, Janowska-Wieczorek A, Ratajczak J.](#) [Related Articles, Links](#)


 **Stem cell plasticity revisited: CXCR4-positive cells expressing mRNA for early muscle, liver and neural cells 'hide out' in the bone marrow.**
Leukemia. 2004 Jan;18(1):29-40.
PMID: 14586476 [PubMed - indexed for MEDLINE]

-  **25:** [Janssen A, Gressens P, Grabenbauer M, Baumgart E, Schad A, Vanhorebeek I, Brouwers A, Declercq PE, Fahimi D, Evrard P, Schoonjans L, Collen D, Carmeliet P, Mannaerts G, Van Veldhoven P, Baes M.](#) [Related Articles, Links](#)

 **Neuronal migration depends on intact peroxisomal function in brain and in extraneuronal tissues.**
J Neurosci. 2003 Oct 29;23(30):9732-41.
PMID: 14586000 [PubMed - indexed for MEDLINE]

-  **26:** [Fukuda S, Kato F, Tozuka Y, Yamaguchi M, Miyamoto Y, Hisatsune T.](#) [Related Articles, Links](#)

 **Two distinct subpopulations of nestin-positive cells in adult mouse dentate gyrus.**
J Neurosci. 2003 Oct 15;23(28):9357-66. Erratum in: J Neurosci. 2004 Jan 7;24(1):24.
PMID: 14561863 [PubMed - indexed for MEDLINE]

-  **27:** [Rice AC, Khaldi A, Harvey HB, Salman NJ, White F, Fillmore H.](#) [Related Articles, Links](#)

Bullock MR.



Proliferation and neuronal differentiation of mitotically active cells following traumatic brain injury.

Exp Neurol. 2003 Oct;183(2):406-17.

PMID: 14552881 [PubMed - indexed for MEDLINE]



28: Shimomura A, Nomura R, Senda T.

[Related Articles](#), [Links](#)



Lithium inhibits apoptosis of mouse neural progenitor cells.

Neuroreport. 2003 Oct 6;14(14):1779-82.

PMID: 14534419 [PubMed - indexed for MEDLINE]



29: Kang SK, Jun ES, Bae YC, Jung JS.

[Related Articles](#), [Links](#)



Interactions between human adipose stromal cells and mouse neural stem cells in vitro.

Brain Res Dev Brain Res. 2003 Oct 10;145(1):141-9.

PMID: 14519500 [PubMed - indexed for MEDLINE]



30: Pimpinelli F, Redaelli E, Restano-Cassulini R, Curia G, Giacobini P, Cariboni A, Wanke E, Bondiolotti GP, Piva F, Maggi R.

[Related Articles](#), [Links](#)



Depolarization differentially affects the secretory and migratory properties of two cell lines of immortalized luteinizing hormone-releasing hormone (LHRH) neurons.

Eur J Neurosci. 2003 Sep;18(6):1410-8.

PMID: 14511321 [PubMed - indexed for MEDLINE]



31: Feuer R, Mena I, Pagarigan RR, Harkins S, Hassett DE, Whitton JL.

[Related Articles](#), [Links](#)



Coxsackievirus B3 and the neonatal CNS: the roles of stem cells, developing neurons, and apoptosis in infection, viral dissemination, and disease.

Am J Pathol. 2003 Oct;163(4):1379-93.

PMID: 14507646 [PubMed - indexed for MEDLINE]



32: Vrana KE, Hipp JD, Goss AM, McCool BA, Riddle DR, Walker SJ, Wettstein PJ, Studer LP, Tabar V, Cunniff K, Chapman K, Vilner L, West MD, Grant KA, Cibelli JB.

[Related Articles](#), [Links](#)



Nonhuman primate parthenogenetic stem cells.

Proc Natl Acad Sci U S A. 2003 Sep 30;100 Suppl 1:11911-6. Epub 2003 Sep 22. Erratum in: Proc Natl Acad Sci U S A. 2004 Jan 13;101(2):693.

PMID: 14504386 [PubMed - indexed for MEDLINE]



33: Tomita S, Ueno M, Sakamoto M, Kitahama Y, Ueki M, Maekawa N, Sakamoto H, Gassmann M, Kageyama R, Ueda N, Gonzalez FJ, Takahama Y.

[Related Articles](#), [Links](#)



Defective brain development in mice lacking the Hif-1alpha gene in neural cells.

Mol Cell Biol. 2003 Oct;23(19):6739-49.

PMID: 12972594 [PubMed - indexed for MEDLINE]



34: Kotani M, Tajima Y, Osanai T, Irie A, Iwatsuki K, Kanai-Azuma M, Imada M, Kato H, Shitara H, Kubo H, Sakuraba H.

[Related Articles](#), [Links](#)



Complementary DNA cloning and characterization of RANDAM-2, a type I membrane molecule specifically expressed on glutamatergic neuronal cells in the mouse cerebrum.

J Neurosci Res. 2003 Sep 1;73(5):603-13.

PMID: 12929128 [PubMed - indexed for MEDLINE]



35: Bai Y, Lin C, Hu Q, Li X, Lu A, Wang S, Li L, Shen L.

[Related Articles](#), [Links](#)




[The induction of neuronal differentiation in the glial fibrillary acid protein

positive human neural progenitor cell line]

Beijing Da Xue Xue Bao. 2003 Jun 18;35(3):266-70. Chinese.


PMID: 12914242 [PubMed - indexed for MEDLINE]


-  **36:** [Yang L, Zheng J, Liu X, Hui G, Fei J, Guo L.](#) [Related Articles, Links](#)

 [Adipose tissue-derived stromal cells differentiate into neuron-like cells]

Sichuan Da Xue Xue Bao Yi Xue Ban. 2003 Jul;34(3):381-4. Chinese.


PMID: 12910668 [PubMed - in process]


-  **37:** [Bennett MR, Rizvi TA, Karyala S, McKinnon RD, Ratner N.](#) [Related Articles, Links](#)

 Aberrant growth and differentiation of oligodendrocyte progenitors in neurofibromatosis type 1 mutants.

J Neurosci. 2003 Aug 6;23(18):7207-17.


PMID: 12904481 [PubMed - indexed for MEDLINE]


-  **38:** [Bieberich E, MacKinnon S, Silva J, Noggle S, Condie BG.](#) [Related Articles, Links](#)

 Regulation of cell death in mitotic neural progenitor cells by asymmetric distribution of prostate apoptosis response 4 (PAR-4) and simultaneous elevation of endogenous ceramide.

J Cell Biol. 2003 Aug 4;162(3):469-79. Epub 2003 Jul 28.

PMID: 12885759 [PubMed - indexed for MEDLINE]


-  **39:** [Rao G, Pedone CA, Coffin CM, Holland EC, Fufts DW.](#) [Related Articles, Links](#)

 c-Myc enhances sonic hedgehog-induced medulloblastoma formation from nestin-expressing neural progenitors in mice.

Neoplasia. 2003 May-Jun;5(3):198-204.


PMID: 12869303 [PubMed - indexed for MEDLINE]


-  **40:** [Bambakidis NC, Wang RZ, Franic L, Miller RH.](#) [Related Articles, Links](#)

 Sonic hedgehog-induced neural precursor proliferation after adult rodent spinal cord injury.

J Neurosurg. 2003 Jul;99(1 Suppl):70-5.

PMID: 12859063 [PubMed - indexed for MEDLINE]


-  **41:** [Garbuzova-Davis S, Willing AE, Zigova T, Saporta S, Justen EB, Lane JC, Hudson JE, Chen N, Davis CD, Sanberg PR.](#) [Related Articles, Links](#)

 Intravenous administration of human umbilical cord blood cells in a mouse model of amyotrophic lateral sclerosis: distribution, migration, and differentiation.

J Hematother Stem Cell Res. 2003 Jun;12(3):255-70.


PMID: 12857367 [PubMed - indexed for MEDLINE]


-  **42:** [Schafer KH, Hagl CI, Rauch U.](#) [Related Articles, Links](#)

 Differentiation of neurospheres from the enteric nervous system.

Pediatr Surg Int. 2003 Jul;19(5):340-4. Epub 2003 Jul 05.


PMID: 12845455 [PubMed - indexed for MEDLINE]


-  **43:** [Yoshida N, Hishiyama S, Yamaguchi M, Hashiguchi M, Miyamoto Y, Kaminogawa S, Hisatsune T.](#) [Related Articles, Links](#)

 Decrease in expression of alpha 5 beta 1 integrin during neuronal differentiation of cortical progenitor cells.

Exp Cell Res. 2003 Jul 15;287(2):262-71.


PMID: 12837282 [PubMed - indexed for MEDLINE]


-  **44:** [Ruhnke M, Ungefroren H, Zehle G, Bader M, Kremer B, Fandrich E.](#) [Related Articles, Links](#)

 Long-term culture and differentiation of rat embryonic stem cell-like cells into neuronal, glial, endothelial, and hepatic lineages.

Stem Cells. 2003;21(4):428-36.


PMID: 12832696 [PubMed - indexed for MEDLINE]


-  **45:** [Kerr DA, Llado J, Shamlott MJ, Maragakis NJ, Irani DN, Crawford TO, Krishnan C, Dike S, Gearhart JD, Rothstein JD.](#) [Related Articles, Links](#)

 **Human embryonic germ cell derivatives facilitate motor recovery of rats with diffuse motor neuron injury.**

J Neurosci. 2003 Jun 15;23(12):5131-40.

PMID: 12832537 [PubMed - indexed for MEDLINE]

-  **46:** [Sahlgren CM, Mikhailov A, Vaittinen S, Pallari HM, Kalimo H, Pant HC, Eriksson JE.](#) [Related Articles, Links](#)

 **Cdk5 regulates the organization of Nestin and its association with p35.**

Mol Cell Biol. 2003 Jul;23(14):5090-106.


PMID: 12832492 [PubMed - indexed for MEDLINE]


-  **47:** [Chen S, Pickard JD, Harris NG.](#) [Related Articles, Links](#)

 **Time course of cellular pathology after controlled cortical impact injury.**

Exp Neurol. 2003 Jul;182(1):87-102.


PMID: 12821379 [PubMed - indexed for MEDLINE]


-  **48:** [Poltavtseva RA, Revishchin AV, Aleksandrova MA, Korochkin LI, Viktorov IV, Sukhikh GT.](#) [Related Articles, Links](#)

 **[Neural stem and progenitor cells of human embryos and fetuses as a basis of biomedical new technologies]**

Ontogenez. 2003 May-Jun;34(3):211-5. Russian.


PMID: 12816052 [PubMed - indexed for MEDLINE]


-  **49:** [Tonchev AB, Yamashima T, Zhao L, Okano HJ, Okano H.](#) [Related Articles, Links](#)

 **Proliferation of neural and neuronal progenitors after global brain ischemia in young adult macaque monkeys.**

Mol Cell Neurosci. 2003 Jun;23(2):292-301.


PMID: 12812760 [PubMed - indexed for MEDLINE]


-  **50:** [Phillips AW, Zhang P, Truckenmiller ME, Keir SD, Bouvier M, Tornatore C, Freed WJ.](#) [Related Articles, Links](#)

 **Platelet-derived growth factor-producing cells immortalized from rat mesencephalon with SV40 large T antigen transduced by an AAV vector.**

Restor Neurol Neurosci. 2003;21(1-2):1-10.

PMID: 12808197 [PubMed - indexed for MEDLINE]


-  **51:** [Angelastro JM, Ignatova TN, Kukekov VG, Steindler DA, Stengren GB, Mendelsohn C, Greene LA.](#) [Related Articles, Links](#)

 **Regulated expression of ATF5 is required for the progression of neural progenitor cells to neurons.**

J Neurosci. 2003 Jun 1;23(11):4590-600.


PMID: 12805299 [PubMed - indexed for MEDLINE]


-  **52:** [Wang DD, Krueger DD, Bordey A.](#) [Related Articles, Links](#)

 **Biophysical properties and ionic signature of neuronal progenitors of the postnatal subventricular zone in situ.**

J Neurophysiol. 2003 Oct;90(4):2291-302. Epub 2003 Jun 11.




















PMID: 12801891 [PubMed - indexed for MEDLINE]



















-  **53:** [Calhoun JD, Lambert NA, Mitalipova MM, Noggle SA, Lyons I, Condie BG, Stice SL.](#) [Related Articles, Links](#)




















 **Differentiation of rhesus embryonic stem cells to neural progenitors and neurons.**

Biochem Biophys Res Commun. 2003 Jun 20;306(1):191-7.


PMID: 12788087 [PubMed - indexed for MEDLINE]


-  **54:** [Walcott JC, Provis JM.](#) [Related Articles, Links](#)
-  **Muller cells express the neuronal progenitor cell marker nestin in both differentiated and undifferentiated human foetal retina.**
Clin Experiment Ophthalmol. 2003 Jun;31(3):246-9.
PMID: 12786777 [PubMed - indexed for MEDLINE]
-  **55:** [Uchida K, Okano H, Hayashi T, Mine Y, Tanioka Y, Nomura T, Kawase T.](#) [Related Articles, Links](#)
-  **Grafted swine neuroepithelial stem cells can form myelinated axons and both efferent and afferent synapses with xenogeneic rat neurons.**
J Neurosci Res. 2003 Jun 15;72(6):661-9.
PMID: 12774306 [PubMed - indexed for MEDLINE]
-  **56:** [Wu D, Tadano M, Edamatsu H, Masago-Toda M, Yamawaki-Kataoka Y, Terashima T, Mizoguchi A, Minami Y, Satoh T, Kataoka T.](#) [Related Articles, Links](#)
-  **Neuronal lineage-specific induction of phospholipase Cepsilon expression in the developing mouse brain.**
Eur J Neurosci. 2003 Apr;17(8):1571-80.
PMID: 12752375 [PubMed - indexed for MEDLINE]
-  **57:** [Murakami T, Fujimoto Y, Yasunaga Y, Ishida O, Tanaka N, Ikuta Y, Ochi M.](#) [Related Articles, Links](#)
-  **Transplanted neuronal progenitor cells in a peripheral nerve gap promote nerve repair.**
Brain Res. 2003 Jun 6;974(1-2):17-24.
PMID: 12742620 [PubMed - indexed for MEDLINE]
-  **58:** [Seigel GM, Sun W, Salvi R, Campbell LM, Sullivan S, Reidy JJ.](#) [Related Articles, Links](#)
-  **Human corneal stem cells display functional neuronal properties.**
Mol Vis. 2003 Apr 30;9:159-63.
PMID: 12724646 [PubMed - indexed for MEDLINE]
-  **59:** [Insua MF, Garelli A, Rotstein NP, German OL, Arias A, Politi LE.](#) [Related Articles, Links](#)
-  **Cell cycle regulation in retinal progenitors by glia-derived neurotrophic factor and docosahexaenoic acid.**
Invest Ophthalmol Vis Sci. 2003 May;44(5):2235-44.
PMID: 12714666 [PubMed - indexed for MEDLINE]
-  **60:** [Hashimoto R, Fujimaki K, Jeong MR, Senatorov VV, Christ L, Leeds P, Chuang DM, Takeda M.](#) [Related Articles, Links](#)
-  **[Neuroprotective actions of lithium]**
Seishin Shinkeigaku Zasshi. 2003;105(1):81-6. Review. Japanese.
PMID: 12701214 [PubMed - indexed for MEDLINE]
-  **61:** [Nakamura Y, Yamamoto M, Oda E, Yamamoto A, Kanemura Y, Hara M, Suzuki A, Yamasaki M, Okano H.](#) [Related Articles, Links](#)
-  **Expression of tubulin beta II in neural stem/progenitor cells and radial fibers during human fetal brain development.**
Lab Invest. 2003 Apr;83(4):479-89.
PMID: 12695551 [PubMed - indexed for MEDLINE]
-  **62:** [Belachew S, Chittajallu R, Aguirre AA, Yuan X, Kirby M, Anderson S, Gallo V.](#) [Related Articles, Links](#)
-  **Postnatal NG2 proteoglycan-expressing progenitor cells are intrinsically multipotent and generate functional neurons.**
J Cell Biol. 2003 Apr 14;161(1):169-86. Epub 2003 Apr 07.
PMID: 12682089 [PubMed - indexed for MEDLINE]
-  **63:** [Liu Z, Martin LJ.](#) [Related Articles, Links](#)

-  Olfactory bulb core is a rich source of neural progenitor and stem cells in adult rodent and human.
J Comp Neurol. 2003 May 12;459(4):368-91.
PMID: 12687705 [PubMed - indexed for MEDLINE]
-  **64:** [Tonchev AB, Yamashima T, Zhao L, Okano H.](#) [Related Articles, Links](#)
-  Differential proliferative response in the postischemic hippocampus, temporal cortex, and olfactory bulb of young adult macaque monkeys.
Glia. 2003 May;42(3):209-24.
PMID: 12673828 [PubMed - indexed for MEDLINE]
-  **65:** [Lowe B, Avila HA, Bloom FR, Gleeson M, Kusser W.](#) [Related Articles, Links](#)
-  Quantitation of gene expression in neural precursors by reverse-transcription polymerase chain reaction using self-quenched, fluorogenic primers.
Anal Biochem. 2003 Apr 1;315(1):95-105. Erratum in: Anal Biochem. 2003 Aug 1;319(1):177.
PMID: 12672417 [PubMed - indexed for MEDLINE]
-  **66:** [Duggal N, Iskander S, Hammond RR.](#) [Related Articles, Links](#)
-  MAP2 and nestin co-expression in dysembryoplastic neuroepithelial tumors.
Clin Neuropathol. 2003 Mar-Apr;22(2):57-65.
PMID: 12670051 [PubMed - indexed for MEDLINE]
-  **67:** [Hao HN, Zhao J, Thomas RL, Parker GC, Lyman WD.](#) [Related Articles, Links](#)
-  Fetal human hematopoietic stem cells can differentiate sequentially into neural stem cells and then astrocytes in vitro.
J Hematother Stem Cell Res. 2003 Feb;12(1):23-32.
PMID: 12662433 [PubMed - indexed for MEDLINE]
-  **68:** [Shibuya S, Miyamoto O, Itano T, Mori S, Norimatsu H.](#) [Related Articles, Links](#)
-  Temporal progressive antigen expression in radial glia after contusive spinal cord injury in adult rats.
Glia. 2003 Apr 15;42(2):172-83.
PMID: 12655601 [PubMed - indexed for MEDLINE]
-  **69:** [Jori FP, Galderisi U, Piegari E, Cipollaro M, Cascino A, Peluso G, Cotrufo R, Giordano A, Melone MA.](#) [Related Articles, Links](#)
-  EGF-responsive rat neural stem cells: molecular follow-up of neuron and astrocyte differentiation in vitro.
J Cell Physiol. 2003 May;195(2):220-33.
PMID: 12652649 [PubMed - indexed for MEDLINE]
-  **70:** [Lou S, Gu P, Chen F, He C, Wang M, Lu C.](#) [Related Articles, Links](#)
-  The effect of bone marrow stromal cells on neuronal differentiation of mesencephalic neural stem cells in Sprague-Dawley rats.
Brain Res. 2003 Apr 4;968(1):114-21.
PMID: 12644269 [PubMed - indexed for MEDLINE]
-  **71:** [Kablar B.](#) [Related Articles, Links](#)
-  Determination of retinal cell fates is affected in the absence of extraocular striated muscles.
Dev Dyn. 2003 Mar;226(3):478-90.
PMID: 12619134 [PubMed - indexed for MEDLINE]
-  **72:** [Kuo HC, Pau KY, Yeoman RR, Mitalipov SM, Okano H, Wolf DP.](#) [Related Articles, Links](#)


-  **Differentiation of monkey embryonic stem cells into neural lineages.**
Biol Reprod. 2003 May;68(5):1727-35. Epub 2002 Dec 11.
PMID: 12606331 [PubMed - indexed for MEDLINE]
-  **73:** [Hashimoto R, Senatorov V, Kanai H, Leeds P, Chuang DM.](#) [Related Articles, Links](#)
-  **Lithium stimulates progenitor proliferation in cultured brain neurons.**
Neuroscience. 2003;117(1):55-61.
PMID: 12605892 [PubMed - indexed for MEDLINE]
-  **74:** [Jung BP, Jugloff DG, Zhang G, Logan R, Brown S, Eubanks JH.](#) [Related Articles, Links](#)
-  **The expression of methyl CpG binding factor MeCP2 correlates with cellular differentiation in the developing rat brain and in cultured cells.**
J Neurobiol. 2003 Apr;55(1):86-96.
PMID: 12605461 [PubMed - indexed for MEDLINE]
-  **75:** [Vogel W, Grunebach F, Messam CA, Kanz L, Brugger W, Buhning HJ.](#) [Related Articles, Links](#)
-  **Heterogeneity among human bone marrow-derived mesenchymal stem cells and neural progenitor cells.**
Haematologica. 2003 Feb;88(2):126-33.
PMID: 12604402 [PubMed - indexed for MEDLINE]
-  **76:** [Miller MW, Peter A, Wharton SB, Wyllie AH.](#) [Related Articles, Links](#)
-  **Proliferation and death of conditionally immortalized neural cells from murine neocortex: p53 alters the ability of neuron-like cells to re-enter the cell cycle.**
Brain Res. 2003 Mar 7;965(1-2):57-66.
PMID: 12591120 [PubMed - indexed for MEDLINE]
-  **77:** [Lee KM, Nguyen C, Ulrich AB, Pour PM, Ouellette MM.](#) [Related Articles, Links](#)
-  **Immortalization with telomerase of the Nestin-positive cells of the human pancreas.**
Biochem Biophys Res Commun. 2003 Feb 21;301(4):1038-44.
PMID: 12589817 [PubMed - indexed for MEDLINE]
-  **78:** [Hosomi S, Yamashita T, Aoki M, Tohyama M.](#) [Related Articles, Links](#)
-  **The p75 receptor is required for BDNF-induced differentiation of neural precursor cells.**
Biochem Biophys Res Commun. 2003 Feb 21;301(4):1011-5.
PMID: 12589813 [PubMed - indexed for MEDLINE]
-  **79:** [Ajo R, Cacicedo L, Navarro C, Sanchez-Franco F.](#) [Related Articles, Links](#)
-  **Growth hormone action on proliferation and differentiation of cerebral cortical cells from fetal rat.**
Endocrinology. 2003 Mar;144(3):1086-97.
PMID: 12586785 [PubMed - indexed for MEDLINE]
-  **80:** [Nikonenko I, Toni N, Moosmayer M, Shigeri Y, Muller D, Sargent Jones L.](#) [Related Articles, Links](#)
-  **Integrins are involved in synaptogenesis, cell spreading, and adhesion in the postnatal brain.**
Brain Res Dev Brain Res. 2003 Feb 16;140(2):185-94.
PMID: 12586424 [PubMed - indexed for MEDLINE]
-  **81:** [Ito H, Nakajima A, Nomoto H, Furukawa S.](#) [Related Articles, Links](#)
-  **Neurotrophins facilitate neuronal differentiation of cultured neural stem cells via induction of mRNA expression of basic helix-loop-helix transcription factors Mash1 and Math1.**


J Neurosci Res. 2003 Mar 1;71(5):648-58.
PMID: 12584723 [PubMed - indexed for MEDLINE]


-  **82:** [Vicario-Abejon C, Yusta-Boyo MJ, Fernandez-Moreno C, de Pablo F.](#) [Related Articles, Links](#)


 Locally born olfactory bulb stem cells proliferate in response to insulin-related factors and require endogenous insulin-like growth factor-I for differentiation into neurons and glia.
J Neurosci. 2003 Feb 1;23(3):895-906.
PMID: 12574418 [PubMed - indexed for MEDLINE]


-  **83:** [Kim G, Choe Y, Park J, Cho S, Kim K.](#) [Related Articles, Links](#)


 Activation of protein kinase A induces neuronal differentiation of HiB5 hippocampal progenitor cells.
Brain Res Mol Brain Res. 2002 Dec 30;109(1-2):134-45.
PMID: 12531523 [PubMed - indexed for MEDLINE]


-  **84:** [Crone SA, Negro A, Trumpp A, Giovannini M, Lee KF.](#) [Related Articles, Links](#)


 Colonic epithelial expression of ErbB2 is required for postnatal maintenance of the enteric nervous system.
Neuron. 2003 Jan 9;37(1):29-40.
PMID: 12526770 [PubMed - indexed for MEDLINE]


-  **85:** [Takekuni K, Ikeda W, Fujito T, Morimoto K, Takeuchi M, Monden M, Takai Y.](#) [Related Articles, Links](#)


 Direct binding of cell polarity protein PAR-3 to cell-cell adhesion molecule nectin at neuroepithelial cells of developing mouse.
J Biol Chem. 2003 Feb 21;278(8):5497-500. Epub 2003 Jan 05.
PMID: 12515806 [PubMed - indexed for MEDLINE]


-  **86:** [Maric D, Maric I, Chang YH, Barker JL.](#) [Related Articles, Links](#)

 Prospective cell sorting of embryonic rat neural stem cells and neuronal and glial progenitors reveals selective effects of basic fibroblast growth factor and epidermal growth factor on self-renewal and differentiation.
J Neurosci. 2003 Jan 1;23(1):240-51.
PMID: 12514221 [PubMed - indexed for MEDLINE]


-  **87:** [Jia Y, Yang Y, Zhou Y, Song Y, Liu L, Song J, Wang X, Zhong L, Yu X.](#) [Related Articles, Links](#)


 [Differentiation of rat bone marrow stromal cells into neuron induced by baicalin]
Zhonghua Yi Xue Za Zhi. 2002 Oct 10;82(19):1337-41. Chinese.
PMID: 12509939 [PubMed - indexed for MEDLINE]


-  **88:** [Rakic S, Zecevic N.](#) [Related Articles, Links](#)




















 Early oligodendrocyte progenitor cells in the human fetal telencephalon.
Glia. 2003 Jan 15;41(2):117-27.
PMID: 12509802 [PubMed - indexed for MEDLINE]



















-  **89:** [Kabos P, Ehteshami M, Kabosova A, Black KL, Yu JS.](#) [Related Articles, Links](#)



















 Generation of neural progenitor cells from whole adult bone marrow.
Exp Neurol. 2002 Dec;178(2):288-93.
PMID: 12504887 [PubMed - indexed for MEDLINE]



















-  **90:** [Hsieh WY, Hsieh YL, Liu DD, Yang SN, Wu JN.](#) [Related Articles, Links](#)



















 Neural progenitor cells resist excitatory amino acid-induced neurotoxicity.
J Neurosci Res. 2003 Jan 15;71(2):272-8.
PMID: 12503090 [PubMed - indexed for MEDLINE]

-  **91:** [Amano T, Inamura T, Wu CM, Kura S, Nakamizo A, Inoha S, Miyazono M, Ikezaki K.](#) [Related Articles, Links](#)
-  **Effects of single low dose irradiation on subventricular zone cells in juvenile rat brain.**
Neurol Res. 2002 Dec;24(8):809-16.
PMID: 12500705 [PubMed - indexed for MEDLINE]
-  **92:** [Sosunov AA, Chelyshev IuA, McKhann G, Krugliakov PP, Balykova OP, Shikhanov NP.](#) [Related Articles, Links](#)
-  **[Neurogenesis in the adult mammalian brain]**
Ontogenez. 2002 Nov-Dec;33(6):405-20. Review. Russian.
PMID: 12500549 [PubMed - indexed for MEDLINE]
-  **93:** [Nacher J, Alonso-Llosa G, Rosell DR, McEwen BS.](#) [Related Articles, Links](#)
-  **NMDA receptor antagonist treatment increases the production of new neurons in the aged rat hippocampus.**
Neurobiol Aging. 2003 Mar-Apr;24(2):273-84.
PMID: 12498961 [PubMed - indexed for MEDLINE]
-  **94:** [Charytoniuk D, Traiffort E, Hantraye P, Hermel JM, Galdes A, Ruat M.](#) [Related Articles, Links](#)
-  **Intrastriatal sonic hedgehog injection increases Patched transcript levels in the adult rat subventricular zone.**
Eur J Neurosci. 2002 Dec;16(12):2351-7.
PMID: 12492430 [PubMed - indexed for MEDLINE]
-  **95:** [Kablar B, Rudnicki MA.](#) [Related Articles, Links](#)
-  **Information provided by the skeletal muscle and associated neurons is necessary for proper brain development.**
Int J Dev Neurosci. 2002 Nov;20(7):573-84.
PMID: 12485625 [PubMed - indexed for MEDLINE]
-  **96:** [Guillemain I, Fontes G, Privat A, Chaudieu I.](#) [Related Articles, Links](#)
-  **Early programmed cell death in human NT2 cell cultures during differentiation induced by all-trans-retinoic acid.**
J Neurosci Res. 2003 Jan 1;71(1):38-45.
PMID: 12478612 [PubMed - indexed for MEDLINE]
-  **97:** [Sleeper E, Tamm C, Frisen J, Zhivotovsky B, Orrenius S, Ceccatelli S.](#) [Related Articles, Links](#)
-  **Cell death in adult neural stem cells.**
Cell Death Differ. 2002 Dec;9(12):1377-8. No abstract available.
PMID: 12478475 [PubMed - indexed for MEDLINE]
-  **98:** [Kempermann G, Gast D, Kronenberg G, Yamaguchi M, Gage FH.](#) [Related Articles, Links](#)
-  **Early determination and long-term persistence of adult-generated new neurons in the hippocampus of mice.**
Development. 2003 Jan;130(2):391-9.
PMID: 12466205 [PubMed - indexed for MEDLINE]
-  **99:** [Ben-Hur T, Einstein O, Mizrahi-Kol R, Ben-Menachem O, Reinhartz E, Karussis D, Abramsky O.](#) [Related Articles, Links](#)
-  **Transplanted multipotential neural precursor cells migrate into the inflamed white matter in response to experimental autoimmune encephalomyelitis.**
Glia. 2003 Jan;41(1):73-80.
PMID: 12465047 [PubMed - indexed for MEDLINE]
-  **100:** [Hung SC, Cheng H, Pan CY, Tsai MJ, Kao LS, Ma HL.](#) [Related Articles, Links](#)

-  **In vitro differentiation of size-sieved stem cells into electrically active neural cells.**
Stem Cells. 2002;20(6):522-9.
PMID: 12456960 [PubMed - indexed for MEDLINE]
-  **101:** [Martin DM, Skidmore JM, Fox SE, Gage PJ, Camper SA.](#) [Related Articles, Links](#)
-  **Pitx2 distinguishes subtypes of terminally differentiated neurons in the developing mouse neuroepithelium.**
Dev Biol. 2002 Dec 1;252(1):84-99.
PMID: 12453462 [PubMed - indexed for MEDLINE]
-  **102:** [Cai J, Wu Y, Mirua T, Pierce JL, Lucero MT, Albertine KH, Spangrude GJ, Rao MS.](#) [Related Articles, Links](#)
-  **Properties of a fetal multipotent neural stem cell (NEP cell).**
Dev Biol. 2002 Nov 15;251(2):221-40.
PMID: 12435354 [PubMed - indexed for MEDLINE]
-  **103:** [Cao QL, Howard RM, Dennison JB, Whittemore SR.](#) [Related Articles, Links](#)
-  **Differentiation of engrafted neuronal-restricted precursor cells is inhibited in the traumatically injured spinal cord.**
Exp Neurol. 2002 Oct;177(2):349-59.
PMID: 12429182 [PubMed - indexed for MEDLINE]
-  **104:** [Gratacos E, Gavalda N, Alberch J.](#) [Related Articles, Links](#)
-  **Bone morphogenetic protein-6 is a neurotrophic factor for calbindin-positive striatal neurons.**
J Neurosci Res. 2002 Dec 1;70(5):638-44.
PMID: 12424731 [PubMed - indexed for MEDLINE]
-  **105:** [Akita J, Takahashi M, Hojo M, Nishida A, Haruta M, Honda Y.](#) [Related Articles, Links](#)
-  **Neuronal differentiation of adult rat hippocampus-derived neural stem cells transplanted into embryonic rat explanted retinas with retinoic acid pretreatment.**
Brain Res. 2002 Nov 8;954(2):286-93.
PMID: 12414111 [PubMed - indexed for MEDLINE]
-  **106:** [Wei LC, Shi M, Chen LW, Cao R, Zhang P, Chan YS.](#) [Related Articles, Links](#)
-  **Nestin-containing cells express glial fibrillary acidic protein in the proliferative regions of central nervous system of postnatal developing and adult mice.**
Brain Res Dev Brain Res. 2002 Nov 15;139(1):9-17.
PMID: 12414089 [PubMed - indexed for MEDLINE]
-  **107:** [Martens DJ, Seaberg RM, van der Kooy D.](#) [Related Articles, Links](#)
-  **In vivo infusions of exogenous growth factors into the fourth ventricle of the adult mouse brain increase the proliferation of neural progenitors around the fourth ventricle and the central canal of the spinal cord.**
Eur J Neurosci. 2002 Sep;16(6):1045-57.
PMID: 12383233 [PubMed - indexed for MEDLINE]
-  **108:** [Knoepfler PS, Cheng PF, Eisenman RN.](#) [Related Articles, Links](#)
-  **N-myc is essential during neurogenesis for the rapid expansion of progenitor cell populations and the inhibition of neuronal differentiation.**
Genes Dev. 2002 Oct 15;16(20):2699-712.
PMID: 12381668 [PubMed - indexed for MEDLINE]
-  **109:** [Shibuya S, Miyamoto O, Auer RN, Itano T, Mori S, Norimatsu H.](#) [Related Articles, Links](#)

-  Embryonic intermediate filament, nestin, expression following traumatic spinal cord injury in adult rats.
Neuroscience. 2002;114(4):905-16.
PMID: 12379246 [PubMed - indexed for MEDLINE]
-  **110:** [Zhao X, Das AV, Thoreson WB, James J, Wattnem TE, Rodriguez-Sierra J, Ahmad I.](#) [Related Articles, Links](#)
-  Adult corneal limbal epithelium: a model for studying neural potential of non-neural stem cells/progenitors.
Dev Biol. 2002 Oct 15;250(2):317-31.
PMID: 12376106 [PubMed - indexed for MEDLINE]
-  **111:** [Shen Q, Zhong W, Jan YN, Temple S.](#) [Related Articles, Links](#)
-  Asymmetric Numb distribution is critical for asymmetric cell division of mouse cerebral cortical stem cells and neuroblasts.
Development. 2002 Oct;129(20):4843-53.
PMID: 12361975 [PubMed - indexed for MEDLINE]
-  **112:** [Uhrbom L, Dai C, Celestino JC, Rosenblum MK, Fuller GN, Holland EC.](#) [Related Articles, Links](#)
-  Ink4a-Arf loss cooperates with KRas activation in astrocytes and neural progenitors to generate glioblastomas of various morphologies depending on activated Akt.
Cancer Res. 2002 Oct 1;62(19):5551-8.
PMID: 12359767 [PubMed - indexed for MEDLINE]
-  **113:** [Milosevic A, Goldman JE.](#) [Related Articles, Links](#)
-  Progenitors in the postnatal cerebellar white matter are antigenically heterogeneous.
J Comp Neurol. 2002 Oct 14;452(2):192-203.
PMID: 12271492 [PubMed - indexed for MEDLINE]
-  **114:** [Kamitori K, Machide M, Tomita K, Nakafuku M, Kohsaka S.](#) [Related Articles, Links](#)
-  Cell-type-specific expression of protein tyrosine kinase-related receptor RYK in the central nervous system of the rat.
Brain Res Mol Brain Res. 2002 Aug 15;104(2):255-66.
PMID: 12225882 [PubMed - indexed for MEDLINE]
-  **115:** [Schunm MA, Castellanos DA, Frydel BR, Sagen J.](#) [Related Articles, Links](#)
-  Enhanced viability and neuronal differentiation of neural progenitors by chromaffin cell co-culture.
Brain Res Dev Brain Res. 2002 Aug 30;137(2):115-25.
PMID: 12220703 [PubMed - indexed for MEDLINE]
-  **116:** [Romero-Ramos M, Vourc'h P, Young HE, Lucas PA, Wu Y, Chivatakarn O, Zaman R, Dunkelman N, el-Kalay MA, Chesselet MF.](#) [Related Articles, Links](#)
-  Neuronal differentiation of stem cells isolated from adult muscle.
J Neurosci Res. 2002 Sep 15;69(6):894-907.
PMID: 12205682 [PubMed - indexed for MEDLINE]
-  **117:** [Murayama A, Matsuzaki Y, Kawaguchi A, Shimazaki T, Okano H.](#) [Related Articles, Links](#)
-  Flow cytometric analysis of neural stem cells in the developing and adult mouse brain.
J Neurosci Res. 2002 Sep 15;69(6):837-47.
PMID: 12205677 [PubMed - indexed for MEDLINE]
-  **118:** [Espinosa-Jeffrey A, Becker-Catania SG, Zhao PM, Cole R, Edmond J, de Vellis J.](#) [Related Articles, Links](#)

-  **Selective specification of CNS stem cells into oligodendroglial or neuronal cell lineage: cell culture and transplant studies.**
J Neurosci Res. 2002 Sep 15;69(6):810-25.
PMID: 12205675 [PubMed - indexed for MEDLINE]
-  **119:** [Johansson CB](#), [Lothian C](#), [Molin M](#), [Okano H](#), [Lendahl U](#). [Related Articles](#), [Links](#)
-  **Nestin enhancer requirements for expression in normal and injured adult CNS.**
J Neurosci Res. 2002 Sep 15;69(6):784-94.
PMID: 12205672 [PubMed - indexed for MEDLINE]
-  **120:** [Ignatova TN](#), [Kukekov VG](#), [Laywell ED](#), [Suslov ON](#), [Vrionis FD](#), [Steindler DA](#). [Related Articles](#), [Links](#)
-  **Human cortical glial tumors contain neural stem-like cells expressing astroglial and neuronal markers in vitro.**
Glia. 2002 Sep;39(3):193-206.
PMID: 12203386 [PubMed - indexed for MEDLINE]
-  **121:** [Mizuguchi M](#), [Yamanouchi H](#), [Becker LE](#), [Itoh M](#), [Takashima S](#). [Related Articles](#), [Links](#)
-  **Doublecortin immunoreactivity in giant cells of tuberous sclerosis and focal cortical dysplasia.**
Acta Neuropathol (Berl). 2002 Oct;104(4):418-24. Epub 2002 Jun 25.
PMID: 12200630 [PubMed - indexed for MEDLINE]
-  **122:** [Kuroda T](#), [Nakamura H](#), [Itoh K](#), [Le WR](#), [Yoshimura S](#), [Takenaka K](#), [Sakai N](#). [Related Articles](#), [Links](#)
-  **Nestin immunoreactivity in local neurons of the adult rat striatum after remote cortical injury.**
J Chem Neuroanat. 2002 Jul;24(2):137-46.
PMID: 12191730 [PubMed - indexed for MEDLINE]
-  **123:** [Vanderwinden JM](#), [Gillard K](#), [De Laet MH](#), [Messam CA](#), [Schiffmann SN](#). [Related Articles](#), [Links](#)
-  **Distribution of the intermediate filament nestin in the muscularis propria of the human gastrointestinal tract.**
Cell Tissue Res. 2002 Aug;309(2):261-8. Epub 2002 Jun 21.
PMID: 12172785 [PubMed - indexed for MEDLINE]
-  **124:** [Haas SJ](#), [Wree A](#). [Related Articles](#), [Links](#)
-  **Dopaminergic differentiation of the Nurr1-expressing immortalized mesencephalic cell line CSM14.1 in vitro.**
J Anat. 2002 Jul;201(1):61-9.
PMID: 12171477 [PubMed - indexed for MEDLINE]
-  **125:** [Cho T](#), [Bae JH](#), [Choi HB](#), [Kim SS](#), [McLarnon JG](#), [Suh-Kim H](#), [Kim SU](#), [Min CK](#). [Related Articles](#), [Links](#)
-  **Human neural stem cells: electrophysiological properties of voltage-gated ion channels.**
Neuroreport. 2002 Aug 7;13(11):1447-52.
PMID: 12167771 [PubMed - indexed for MEDLINE]
-  **126:** [Khelfaoui M](#), [Guimiot F](#), [Simonneau M](#). [Related Articles](#), [Links](#)
-  **Early neuronal and glial determination from mouse E10.5 telencephalon embryonic stem cells: an in vitro study.**
Neuroreport. 2002 Jul 2;13(9):1209-14.
PMID: 12151771 [PubMed - indexed for MEDLINE]
-  **127:** [Tang Y](#), [Katuri V](#), [Iqbal S](#), [Narayan T](#), [Wang Z](#), [Lu RS](#), [Mishra L](#), [Mishra B](#). [Related Articles](#), [Links](#)

-  **ELF a beta-spectrin is a neuronal precursor cell marker in developing mammalian brain; structure and organization of the elf/beta-G spectrin gene.**
Oncogene. 2002 Aug 8;21(34):5255-67.
PMID: 12149647 [PubMed - indexed for MEDLINE]
-  **128:** Zhang X, Li X, Wu J, Wang Z, Xu H, Yang D. Related Articles, Links
-  **[Isolation, cultivation and identification of stem cells from cerebral cortex of mouse embryo]**
Zhonghua Yi Xue Za Zhi. 2002 Jun 25;82(12):832-5. Chinese.
PMID: 12126533 [PubMed - indexed for MEDLINE]
-  **129:** Buchet D, Buc-Caron MH, Sabate O, Lachapelle F, Mallet J. Related Articles, Links
-  **Long-term fate of human telencephalic progenitor cells grafted into the adult mouse brain: effects of previous amplification in vitro.**
J Neurosci Res. 2002 May 1;68(3):276-83.
PMID: 12111857 [PubMed - indexed for MEDLINE]
-  **130:** Gu H, Wang S, Messam CA, Yao Z. Related Articles, Links
-  **Distribution of nestin immunoreactivity in the normal adult human forebrain.**
Brain Res. 2002 Jul 12;943(2):174-80.
PMID: 12101039 [PubMed - indexed for MEDLINE]
-  **131:** Coronas V, Arnault P, Roger M. Related Articles, Links
-  **Cortical diffusible factors increase MAP-2 immunoreactive neuronal population in thalamic cultures.**
Neurosci Res. 2002 May;43(1):57-67.
PMID: 12074841 [PubMed - indexed for MEDLINE]
-  **132:** Lundberg C, Englund U, Trono D, Bjorklund A, Wictorin K. Related Articles, Links
-  **Differentiation of the RN33B cell line into forebrain projection neurons after transplantation into the neonatal rat brain.**
Exp Neurol. 2002 Jun;175(2):370-87.
PMID: 12061867 [PubMed - indexed for MEDLINE]
-  **133:** Safford KM, Hicok KC, Safford SD, Halvorsen YD, Wilkison WO, Gimble JM, Rice HE. Related Articles, Links
-  **Neurogenic differentiation of murine and human adipose-derived stromal cells.**
Biochem Biophys Res Commun. 2002 Jun 7;294(2):371-9.
PMID: 12051722 [PubMed - indexed for MEDLINE]
-  **134:** Armstrong RJ, Hurelbrink CB, Tyers P, Ratcliffe EL, Richards A, Dunnett SB, Rosser AE, Barker RA. Related Articles, Links
-  **The potential for circuit reconstruction by expanded neural precursor cells explored through porcine xenografts in a rat model of Parkinson's disease.**
Exp Neurol. 2002 May;175(1):98-111.
PMID: 12009763 [PubMed - indexed for MEDLINE]
-  **135:** Schmidt-Kastner R, Humpel C. Related Articles, Links
-  **Nestin expression persists in astrocytes of organotypic slice cultures from rat cortex.**
Int J Dev Neurosci. 2002 Feb;20(1):29-38.
PMID: 12008072 [PubMed - indexed for MEDLINE]
-  **136:** Nguyen L, Malgrange B, Belachew S, Rogister B, Rocher V, Moonen G, Rigo JM. Related Articles, Links



Functional glycine receptors are expressed by postnatal nestin-positive neural stem/progenitor cells.

Eur J Neurosci. 2002 Apr;15(8):1299-305.

PMID: 11994124 [PubMed - indexed for MEDLINE]



137: [Buzanska L, Machaj EK, Zablocka B, Pojda Z, Domanska-Janik K.](#) [Related Articles, Links](#)



Human cord blood-derived cells attain neuronal and glial features in vitro.

J Cell Sci. 2002 May 15;115(Pt 10):2131-8.

PMID: 11973354 [PubMed - indexed for MEDLINE]



138: [Poltavtseva RA, Marey MV, Aleksandrova MA, Revishchin AV, Korochkin LI, Sukhikh GT.](#) [Related Articles, Links](#)



Evaluation of progenitor cell cultures from human embryos for neurotransplantation.

Brain Res Dev Brain Res. 2002 Mar 31;134(1-2):149-54.

PMID: 11947945 [PubMed - indexed for MEDLINE]



139: [Englund U, Bjorklund A, Wictorin K.](#) [Related Articles, Links](#)



Migration patterns and phenotypic differentiation of long-term expanded human neural progenitor cells after transplantation into the adult rat brain.

Brain Res Dev Brain Res. 2002 Mar 31;134(1-2):123-41.

PMID: 11947943 [PubMed - indexed for MEDLINE]



140: [Messam CA, Hou J, Berman JW, Major EO.](#) [Related Articles, Links](#)



Analysis of the temporal expression of nestin in human fetal brain derived neuronal and glial progenitor cells.

Brain Res Dev Brain Res. 2002 Mar 31;134(1-2):87-92.

PMID: 11947939 [PubMed - indexed for MEDLINE]



141: [Krum JM, Phillips TM, Rosenstein JM.](#) [Related Articles, Links](#)



Changes in astroglial GLT-1 expression after neural transplantation or stab wounds.

Exp Neurol. 2002 Apr;174(2):137-49.

PMID: 11922656 [PubMed - indexed for MEDLINE]



142: [Fults D, Pedone C, Dai C, Holland EC.](#) [Related Articles, Links](#)



MYC expression promotes the proliferation of neural progenitor cells in culture and in vivo.

Neoplasia. 2002 Jan-Feb;4(1):32-9.

PMID: 11922389 [PubMed - indexed for MEDLINE]



143: [Lenka N, Lu ZJ, Sasse P, Hescheler J, Fleischmann BK.](#) [Related Articles, Links](#)



Quantitation and functional characterization of neural cells derived from ES cells using nestin enhancer-mediated targeting in vitro.

J Cell Sci. 2002 Apr 1;115(Pt 7):1471-85.

PMID: 11896195 [PubMed - indexed for MEDLINE]



144: [Kojima A, Tator CH.](#) [Related Articles, Links](#)



Intrathecal administration of epidermal growth factor and fibroblast growth factor 2 promotes ependymal proliferation and functional recovery after spinal cord injury in adult rats.

J Neurotrauma. 2002 Feb;19(2):223-38.

PMID: 11893024 [PubMed - indexed for MEDLINE]



145: [Kotani M, Osanai T, Tajima Y, Kato H, Imada M, Kaneda H, Kubo H, Sakuraba H.](#) [Related Articles, Links](#)




Identification of neuronal cell lineage-specific molecules in the neuronal

differentiation of P19 EC cells and mouse central nervous system.

J Neurosci Res. 2002 Mar 1;67(5):595-606.

PMID: 11891772 [PubMed - indexed for MEDLINE]


-  **146:** [Lemkine GF, Mantero S, Migne C, Raji A, Goula D, Normandie P, Levi G, Demeneix BA.](#) Related Articles, Links



Preferential transfection of adult mouse neural stem cells and their immediate progeny in vivo with polyethylenimine.

Mol Cell Neurosci. 2002 Feb;19(2):165-74.

PMID: 11860270 [PubMed - indexed for MEDLINE]


-  **147:** [Obrenovitch TP, Godukhin OV, Chazot PL.](#) Related Articles, Links



Repetitive spreading depression induces nestin protein expression in the cortex of rats and mice. Is this upregulation initiated by N-methyl-D-aspartate receptors?

Neurosci Lett. 2002 Mar 8;320(3):161-3.

PMID: 11852186 [PubMed - indexed for MEDLINE]


-  **148:** [Malgrange B, Belachew S, Thiry M, Nguyen L, Rogister B, Alvarez ML, Rigo JM, Van De Water TR, Moonen G, Lefebvre PP.](#) Related Articles, Links



Proliferative generation of mammalian auditory hair cells in culture.

Mech Dev. 2002 Mar;112(1-2):79-88.

PMID: 11850180 [PubMed - indexed for MEDLINE]


-  **149:** [Wen PH, Friedrich VL Jr, Shioi J, Robakis NK, Elder GA.](#) Related Articles, Links



Presenilin-1 is expressed in neural progenitor cells in the hippocampus of adult mice.

Neurosci Lett. 2002 Jan 25;318(2):53-6.

PMID: 11796184 [PubMed - indexed for MEDLINE]

-  **150:** [Schraermeyer U, Thumann G, Luther T, Kociok N, Armhold S, Kruttwig K, Andressen C, Addicks K, Bartz-Schmidt KU.](#) Related Articles, Links



Subretinally transplanted embryonic stem cells rescue photoreceptor cells from degeneration in the RCS rats.

Cell Transplant. 2001;10(8):673-80.

PMID: 11814109 [PubMed - indexed for MEDLINE]


-  **151:** [Tzeng SF.](#) Related Articles, Links



Neural progenitors isolated from newborn rat spinal cords differentiate into neurons and astroglia.

J Biomed Sci. 2002 Jan-Feb;9(1):10-6.

PMID: 11810020 [PubMed - indexed for MEDLINE]

-  **152:** [Lutolf S, Radtke F, Aguet M, Suter U, Taylor V.](#) Related Articles, Links



Notch1 is required for neuronal and glial differentiation in the cerebellum.

Development. 2002 Jan;129(2):373-85.

PMID: 11807030 [PubMed - indexed for MEDLINE]


-  **153:** [Hughes SM, Moussavi-Harami F, Sauter SL, Davidson BL.](#) Related Articles, Links



Viral-mediated gene transfer to mouse primary neural progenitor cells.

Mol Ther. 2002 Jan;5(1):16-24.

PMID: 11786041 [PubMed - indexed for MEDLINE]


-  **154:** [Carmel JB, Galante A, Soteropoulos P, Tolias P, Recce M, Young W, Hart RP.](#) Related Articles, Links



Gene expression profiling of acute spinal cord injury reveals spreading inflammatory signals and neuron loss.

Physiol Genomics. 2001 Dec 21;7(2):201-13. Epub 2001 Nov 15.

PMID: 11773606 [PubMed - indexed for MEDLINE]

-  **155:** [Blumcke I, Schewe JC, Normann S, Brustle O, Schramm J, Elger CE, Wiestler OD.](#) Related Articles, Links



Increase of nestin-immunoreactive neural precursor cells in the dentate gyrus of pediatric patients with early-onset temporal lobe epilepsy.

Hippocampus. 2001;11(3):311-21. Erratum in: Hippocampus 2001;11(4):478.

PMID: 11769312 [PubMed - indexed for MEDLINE]

-  **156:** [Tzeng SF, Bresnahan JC, Beattie MS, de Vellis J.](#)


Related Articles, Links



Upregulation of the HLH Id gene family in neural progenitors and glial cells of the rat spinal cord following contusion injury.

J Neurosci Res. 2001 Dec 15;66(6):1161-72.

PMID: 11746449 [PubMed - indexed for MEDLINE]

-  **157:** [Piper DR, Muijtaba T, Keyoung H, Roy NS, Goldman SA, Rao MS, Lucero MT.](#)


Related Articles, Links



Identification and characterization of neuronal precursors and their progeny from human fetal tissue.

J Neurosci Res. 2001 Nov 1;66(3):356-68.

PMID: 11746353 [PubMed - indexed for MEDLINE]

-  **158:** [Kernie SG, Erwin TM, Parada LF.](#)

Related Articles, Links



Brain remodeling due to neuronal and astrocytic proliferation after controlled cortical injury in mice.

J Neurosci Res. 2001 Nov 1;66(3):317-26.

PMID: 11746349 [PubMed - indexed for MEDLINE]

-  **159:** [Okawa H, Okuda O, Arai H, Sakuragawa N, Sato K.](#)


Related Articles, Links



Amniotic epithelial cells transform into neuron-like cells in the ischemic brain.

Neuroreport. 2001 Dec 21;12(18):4003-7.

PMID: 11742228 [PubMed - indexed for MEDLINE]

-  **160:** [Revishchin AV, Poltavtseva RA, Marei MV, Aleksandrova MA, Viktorov IV, Korochkin LI, Sukhikh GT.](#)


Related Articles, Links



Structure of cell clusters formed in cultures of dissociated human embryonic brain.

Bull Exp Biol Med. 2001 Sep;132(3):856-60.

PMID: 11740577 [PubMed - indexed for MEDLINE]

-  **161:** [Son GH, Geum D, Jung H, Kim K.](#)


Related Articles, Links



Glucocorticoid inhibits growth factor-induced differentiation of hippocampal progenitor HiB5 cells.

J Neurochem. 2001 Dec;79(5):1013-21.

PMID: 11739613 [PubMed - indexed for MEDLINE]

-  **162:** [Carpenter MK, Inokuma MS, Denham J, Muijtaba T, Chiu CP, Rao MS.](#)


Related Articles, Links



Enrichment of neurons and neural precursors from human embryonic stem cells.

Exp Neurol. 2001 Dec;172(2):383-97.

PMID: 11716562 [PubMed - indexed for MEDLINE]

-  **163:** [Kim J, Choi SC, Kim TH, Kim KD, Cho SY, Park SS, Lee SH.](#)





















Related Articles, Links



Isolation of neuronal precursors from differentiating P19 embryonal carcinoma cells by neuronal T alpha 1-promoter-driven GFP.

Int J Dev Neurosci. 2001 Nov;19(7):631-8.


PMID: 11705667 [PubMed - indexed for MEDLINE]

-  **164:** [Holmin S, von Gertten C, Sandberg-Nordqvist AC, Lendahl U, Mathiesen T](#) [Related Articles, Links](#)
 Induction of astrocytic nestin expression by depolarization in rats.
Neurosci Lett. 2001 Nov 16;314(3):151-5.
PMID: 11704306 [PubMed - indexed for MEDLINE]
-  **165:** [Groszer M, Erickson R, Scripture-Adams DD, Lesche R, Trumpp A, Zack JA, Kornblum HI, Liu X, Wu H](#) [Related Articles, Links](#)
 Negative regulation of neural stem/progenitor cell proliferation by the Pten tumor suppressor gene in vivo.
Science. 2001 Dec 7;294(5549):2186-9. Epub 2001 Nov 01.
PMID: 11691952 [PubMed - indexed for MEDLINE]
-  **166:** [Ciccolini F, Svendsen CN](#) [Related Articles, Links](#)
 Neurotrophin responsiveness is differentially regulated in neurons and precursors isolated from the developing striatum.
J Mol Neurosci. 2001 Aug;17(1):25-33.
PMID: 11665860 [PubMed - indexed for MEDLINE]
-  **167:** [Lobsiger CS, Smith PM, Buchstaller J, Schweitzer B, Franklin RJ, Suter U, Taylor V](#) [Related Articles, Links](#)
 SpL201: a conditionally immortalized Schwann cell precursor line that generates myelin.
Glia. 2001 Oct;36(1):31-47.
PMID: 11571782 [PubMed - indexed for MEDLINE]
-  **168:** [Camarero G, Avendano C, Fernandez-Moreno C, Villar A, Contreras J, de Pablo F, Pichel JG, Varela-Nieto I](#) [Related Articles, Links](#)
 Delayed inner ear maturation and neuronal loss in postnatal Igf-1-deficient mice.
J Neurosci. 2001 Oct 1;21(19):7630-41.
PMID: 11567053 [PubMed - indexed for MEDLINE]
-  **169:** [Duggal N, Iskander S, Hammond RR](#) [Related Articles, Links](#)
 Nestin expression in cortical dysplasia.
J Neurosurg. 2001 Sep;95(3):459-65.
PMID: 11565868 [PubMed - indexed for MEDLINE]
-  **170:** [Taylor JP, Sater R, French J, Baltuch G, Crino PB](#) [Related Articles, Links](#)
 Transcription of intermediate filament genes is enhanced in focal cortical dysplasia.
Acta Neuropathol (Berl). 2001 Aug;102(2):141-8.
PMID: 11563628 [PubMed - indexed for MEDLINE]
-  **171:** [Mitchell BD, Gibbons B, Allen LR, Stella J, D'Mello SR](#) [Related Articles, Links](#)
 Aberrant apoptosis in the neurological mutant Flathead is associated with defective cytokinesis of neural progenitor cells.
Brain Res Dev Brain Res. 2001 Sep 23;130(1):53-63.
PMID: 11557093 [PubMed - indexed for MEDLINE]
-  **172:** [Nacher J, Crespo C, McEwen BS](#) [Related Articles, Links](#)
 Doublecortin expression in the adult rat telencephalon.
Eur J Neurosci. 2001 Aug;14(4):629-44.
PMID: 11556888 [PubMed - indexed for MEDLINE]
-  **173:** [Reimers D, Lopez-Toledano MA, Mason I, Cuevas P, Redondo C, Herranz AS, Lobo MV, Bazan E](#) [Related Articles, Links](#)
 Developmental expression of fibroblast growth factor (FGF) receptors in neural stem cell progeny. Modulation of neuronal and glial lineages by

basic FGF treatment.

Neurol Res. 2001 Sep;23(6):612-21.

PMID: 11547930 [PubMed - indexed for MEDLINE]


-  **174:** [Keyoung HM, Roy NS, Benraiss A, Louissaint A Jr, Suzuki A, Hashimoto M, Rashbaum WK, Okano H, Goldman SA.](#) [Related Articles, Links](#)



High-yield selection and extraction of two promoter-defined phenotypes of neural stem cells from the fetal human brain.

Nat Biotechnol. 2001 Sep;19(9):843-50.

PMID: 11533643 [PubMed - indexed for MEDLINE]


-  **175:** [Akbarian S, Bates B, Liu RJ, Skirboll SL, Pejchal T, Coppola V, Sun LD, Fan G, Kucera J, Wilson MA, Tessarollo L, Kosofsky BE, Taylor JR, Bothwell M, Nestler EJ, Aghajanian GK, Jaenisch R.](#) [Related Articles, Links](#)



Neurotrophin-3 modulates noradrenergic neuron function and opiate withdrawal.

Mol Psychiatry. 2001 Sep;6(5):593-604.

PMID: 11526474 [PubMed - indexed for MEDLINE]


-  **176:** [Graus-Porta D, Blaess S, Senften M, Littlewood-Evans A, Damsky C, Huang Z, Orban P, Klein R, Schittny JC, Muller U.](#) [Related Articles, Links](#)



Beta1-class integrins regulate the development of laminae and folia in the cerebral and cerebellar cortex.

Neuron. 2001 Aug 16;31(3):367-79.

PMID: 11516395 [PubMed - indexed for MEDLINE]

-  **177:** [Rietze RL, Valcanis H, Brooker GF, Thomas T, Voss AK, Bartlett PF.](#) [Related Articles, Links](#)



Purification of a pluripotent neural stem cell from the adult mouse brain.

Nature. 2001 Aug 16;412(6848):736-9.

PMID: 11507641 [PubMed - indexed for MEDLINE]


-  **178:** [Bian W, Yang J, Tang K, Jing NH.](#) [Related Articles, Links](#)



[Nestin expression during P19 neuron differentiation]

Sheng Li Xue Bao. 1999 Jun;51(3):246-52. Chinese.

PMID: 11498984 [PubMed - indexed for MEDLINE]


-  **179:** [Ohmiya M, Fukumitsu H, Nitta A, Nomoto H, Furukawa Y, Furukawa S.](#) [Related Articles, Links](#)



Administration of FGF-2 to embryonic mouse brain induces hydrocephalic brain morphology and aberrant differentiation of neurons in the postnatal cerebral cortex.

J Neurosci Res. 2001 Aug 1;65(3):228-35.

PMID: 11494357 [PubMed - indexed for MEDLINE]

-  **180:** [Sawamoto K, Yamamoto A, Kawaguchi A, Yamaguchi M, Mori K, Goldman SA, Okano H.](#) [Related Articles, Links](#)



Direct isolation of committed neuronal progenitor cells from transgenic mice coexpressing spectrally distinct fluorescent proteins regulated by stage-specific neural promoters.

J Neurosci Res. 2001 Aug 1;65(3):220-7.

PMID: 11494356 [PubMed - indexed for MEDLINE]

-  **181:** [Doyle KL, Khan M, Cunningham AM.](#) [Related Articles, Links](#)







































Expression of the intermediate filament protein nestin by sustentacular cells in mature olfactory neuroepithelium.

J Comp Neurol. 2001 Aug 20;437(2):186-95.

PMID: 11494251 [PubMed - indexed for MEDLINE]

[Menet V, Gimenez y Ribotta M, Chauvet N, Drian MJ, Lannoy J.](#) [Related Articles, Links](#)

-  **182:** [Colucci-Guyon E, Privat A.](#)
 Inactivation of the glial fibrillary acidic protein gene, but not that of vimentin, improves neuronal survival and neurite growth by modifying adhesion molecule expression.
J Neurosci. 2001 Aug 15;21(16):6147-58.
PMID: 11487638 [PubMed - indexed for MEDLINE]
-  **183:** [O'Shea KS.](#) [Related Articles, Links](#)
 Neuronal differentiation of mouse embryonic stem cells: lineage selection and forced differentiation paradigms.
Blood Cells Mol Dis. 2001 May-Jun;27(3):705-12.
PMID: 11482885 [PubMed - indexed for MEDLINE]
-  **184:** [Irvin DK, Zurcher SD, Nguyen T, Weinmaster G, Kornblum HI.](#) [Related Articles, Links](#)
 Expression patterns of Notch1, Notch2, and Notch3 suggest multiple functional roles for the Notch-DSL signaling system during brain development.
J Comp Neurol. 2001 Jul 23;436(2):167-81.
PMID: 11438922 [PubMed - indexed for MEDLINE]
-  **185:** [Andrae J, Hansson I, Afink GB, Nister M.](#) [Related Articles, Links](#)
 Platelet-derived growth factor receptor-alpha in ventricular zone cells and in developing neurons.
Mol Cell Neurosci. 2001 Jun;17(6):1001-13.
PMID: 11414789 [PubMed - indexed for MEDLINE]
-  **186:** [Vitry S, Avellana-Adalid V, Lachapelle F, Evercooren AB.](#) [Related Articles, Links](#)
 Migration and multipotentiality of PSA-NCAM+ neural precursors transplanted in the developing brain.
Mol Cell Neurosci. 2001 Jun;17(6):983-1000.
PMID: 11414788 [PubMed - indexed for MEDLINE]
-  **187:** [Gao X, Bian W, Yang J, Tang K, Kitani H, Atsumi T, Jing N.](#) [Related Articles, Links](#)
 A role of N-cadherin in neuronal differentiation of embryonic carcinoma P19 cells.
Biochem Biophys Res Commun. 2001 Jun 29;284(5):1098-103.
PMID: 11414696 [PubMed - indexed for MEDLINE]
-  **188:** [Campos LS, Duarte AJ, Branco T, Henrique D.](#) [Related Articles, Links](#)
 mDII1 and mDII3 expression in the developing mouse brain: role in the establishment of the early cortex.
J Neurosci Res. 2001 Jun 15;64(6):590-8.
PMID: 11398182 [PubMed - indexed for MEDLINE]
-  **189:** [Duittoz AH, Hevor T.](#) [Related Articles, Links](#)
 Primary culture of neural precursors from the ovine central nervous system (CNS).
J Neurosci Methods. 2001 May 30;107(1-2):131-40.
PMID: 11389950 [PubMed - indexed for MEDLINE]
-  **190:** [Sawamoto K, Nakao N, Kakishita K, Ogawa Y, Toyama Y, Yamamoto A, Yamaguchi M, Mori K, Goldman SA, Itakura T, Okano H.](#) [Related Articles, Links](#)
 Generation of dopaminergic neurons in the adult brain from mesencephalic precursor cells labeled with a nestin-GFP transgene.
J Neurosci. 2001 Jun 1;21(11):3895-903.
PMID: 11356877 [PubMed - indexed for MEDLINE]

-  **191:** [Ciccolini F.](#) [Related Articles](#), [Links](#)
 Identification of two distinct types of multipotent neural precursors that appear sequentially during CNS development.
Mol Cell Neurosci. 2001 May;17(5):895-907.
PMID: 11358486 [PubMed - indexed for MEDLINE]
-  **192:** [Skogh C, Eriksson C, Kokaia M, Meijer XC, Wahlberg LU, Victorin K, Campbell K.](#) [Related Articles](#), [Links](#)
 Generation of regionally specified neurons in expanded glial cultures derived from the mouse and human lateral ganglionic eminence.
Mol Cell Neurosci. 2001 May;17(5):811-20.
PMID: 11358480 [PubMed - indexed for MEDLINE]
-  **193:** [Trophee V, Hitoshi S, Sirard C, Mak TW, Rossant J, van der Kooy D.](#) [Related Articles](#), [Links](#)
 Direct neural fate specification from embryonic stem cells: a primitive mammalian neural stem cell stage acquired through a default mechanism.
Neuron. 2001 Apr;30(1):65-78.
PMID: 11343645 [PubMed - indexed for MEDLINE]
-  **194:** [Yan Y, Yang J, Bian W, Jing N.](#) [Related Articles](#), [Links](#)
 Mouse nestin protein localizes in growth cones of P19 neurons and cerebellar granule cells.
Neurosci Lett. 2001 Apr 20;302(2-3):89-92.
PMID: 11290394 [PubMed - indexed for MEDLINE]
-  **195:** [Durbec P, Rougon G.](#) [Related Articles](#), [Links](#)
 Transplantation of mammalian olfactory progenitors into chick hosts reveals migration and differentiation potentials dependent on cell commitment.
Mol Cell Neurosci. 2001 Mar;17(3):561-76.
PMID: 11273650 [PubMed - indexed for MEDLINE]
-  **196:** [Akamatsu W, Okano H.](#) [Related Articles](#), [Links](#)
 [Neural stem cell, as a source of graft material for transplantation in neuronal disease]
No To Hattatsu. 2001 Mar;33(2):114-20. Review. Japanese.
PMID: 11260912 [PubMed - indexed for MEDLINE]
-  **197:** [Maccioni RB, Otth C, Concha IL, Munoz JP.](#) [Related Articles](#), [Links](#)
 The protein kinase Cdk5. Structural aspects, roles in neurogenesis and involvement in Alzheimer's pathology.
Eur J Biochem. 2001 Mar;268(6):1518-27. Review.
PMID: 11248668 [PubMed - indexed for MEDLINE]
-  **198:** [Li BS, Ma W, Zhang L, Barker JL, Stenger DA, Pant HC.](#) [Related Articles](#), [Links](#)
 Activation of phosphatidylinositol-3 kinase (PI-3K) and extracellular regulated kinases (Erk1/2) is involved in muscarinic receptor-mediated DNA synthesis in neural progenitor cells.
J Neurosci. 2001 Mar 1;21(5):1569-79.
PMID: 11222647 [PubMed - indexed for MEDLINE]
-  **199:** [Kawaguchi A, Miyata T, Sawamoto K, Takashita N, Murayama A, Akamatsu W, Ogawa M, Okabe M, Tano Y, Goldman SA, Okano H.](#) [Related Articles](#), [Links](#)
 Nestin-EGFP transgenic mice: visualization of the self-renewal and multipotency of CNS stem cells.
Mol Cell Neurosci. 2001 Feb;17(2):259-73.

PMID: 11178865 [PubMed - indexed for MEDLINE]


-  **200:** [Nacher J, Rosell DR, Alonso-Llosa G, McEwen BS.](#) [Related Articles, Links](#)



NMDA receptor antagonist treatment induces a long-lasting increase in the number of proliferating cells, PSA-NCAM-immunoreactive granule neurons and radial glia in the adult rat dentate gyrus.

Eur J Neurosci. 2001 Feb;13(3):512-20.

PMID: 11168558 [PubMed - indexed for MEDLINE]

-  **201:** [Ehrlich ME, Conti L, Toselli M, Taglietti L, Fiorillo E, Taglietti V, Ivkovic S, Guinea B, Tranberg A, Sipione S, Rigamonti D, Cattaneo E.](#) [Related Articles, Links](#)



ST14A cells have properties of a medium-size spiny neuron.

Exp Neurol. 2001 Feb;167(2):215-26.

PMID: 11161610 [PubMed - indexed for MEDLINE]

-  **202:** [Akiyama Y, Honmou O, Kato T, Ueda T, Hashi K, Kocsis JD.](#) [Related Articles, Links](#)



Transplantation of clonal neural precursor cells derived from adult human brain establishes functional peripheral myelin in the rat spinal cord.

Exp Neurol. 2001 Jan;167(1):27-39.

PMID: 11161590 [PubMed - indexed for MEDLINE]


-  **203:** [Heuer GG, Skorupa AF, Prasad Alur RK, Jiang K, Wolfe JH.](#) [Related Articles, Links](#)



Accumulation of abnormal amounts of glycosaminoglycans in murine mucopolysaccharidosis type VII neural progenitor cells does not alter the growth rate or efficiency of differentiation into neurons.

Mol Cell Neurosci. 2001 Jan;17(1):167-78.

PMID: 11161477 [PubMed - indexed for MEDLINE]


-  **204:** [Mani S, Shen Y, Schaefer J, Meiri KF.](#) [Related Articles, Links](#)



Failure to express GAP-43 during neurogenesis affects cell cycle regulation and differentiation of neural precursors and stimulates apoptosis of neurons.

Mol Cell Neurosci. 2001 Jan;17(1):54-66.

PMID: 11161469 [PubMed - indexed for MEDLINE]


-  **205:** [Machida Y, Murai K, Miyake K, Iijima S.](#) [Related Articles, Links](#)



Expression of chromatin remodeling factors during neural differentiation.

J Biochem (Tokyo). 2001 Jan;129(1):43-9.

PMID: 11134956 [PubMed - indexed for MEDLINE]


-  **206:** [Armhold S, Lenartz D, Kruttwig K, Klinz FJ, Kolossov E, Hescheler J, Sturm V, Andressen C, Addicks K.](#) [Related Articles, Links](#)



Differentiation of green fluorescent protein-labeled embryonic stem cell-derived neural precursor cells into Thy-1-positive neurons and glia after transplantation into adult rat striatum.

J Neurosurg. 2000 Dec;93(6):1026-32.

PMID: 11117845 [PubMed - indexed for MEDLINE]


-  **207:** [Mezey E, Chandross KJ, Harta G, Maki RA, McKercher SR.](#) [Related Articles, Links](#)



Turning blood into brain: cells bearing neuronal antigens generated in vivo from bone marrow.

Science. 2000 Dec 1;290(5497):1779-82.

PMID: 11099419 [PubMed - indexed for MEDLINE]

-  **208:** [Nishida A, Takahashi M, Tanihara H, Nakano I, Takahashi JB, Mizoguchi A, Ide C, Honda Y.](#) [Related Articles, Links](#)



Incorporation and differentiation of hippocampus-derived neural stem

cells transplanted in injured adult rat retina.
Invest Ophthalmol Vis Sci. 2000 Dec;41(13):4268-74.
PMID: 11095625 [PubMed - indexed for MEDLINE]


 **209:** [Wong NK, He BP, Strong MJ.](#)

[Related Articles, Links](#)



Characterization of neuronal intermediate filament protein expression in cervical spinal motor neurons in sporadic amyotrophic lateral sclerosis (ALS).

J Neuropathol Exp Neurol. 2000 Nov;59(11):972-82.
PMID: 11089575 [PubMed - indexed for MEDLINE]


 **210:** [Kramer PR, Wray S.](#)

[Related Articles, Links](#)



Midline nasal tissue influences nestin expression in nasal-placode-derived luteinizing hormone-releasing hormone neurons during development.

Dev Biol. 2000 Nov 15;227(2):343-57.
PMID: 11071759 [PubMed - indexed for MEDLINE]


 **211:** [Hagihara K, Watanabe K, Chun J, Yamaguchi Y.](#)

[Related Articles, Links](#)



Glypican-4 is an FGF2-binding heparan sulfate proteoglycan expressed in neural precursor cells.

Dev Dyn. 2000 Nov;219(3):353-67.
PMID: 11066092 [PubMed - indexed for MEDLINE]

 **212:** [Przyborski SA, Morton IE, Wood A, Andrews PW.](#)

[Related Articles, Links](#)



Developmental regulation of neurogenesis in the pluripotent human embryonal carcinoma cell line NTERA-2.

Eur J Neurosci. 2000 Oct;12(10):3521-8.
PMID: 11029621 [PubMed - indexed for MEDLINE]


 **213:** [Ajtai BM, Kalman M.](#)

[Related Articles, Links](#)



Axon growth failure following corpus callosum lesions precedes glial reaction in perinatal rats.

Anat Embryol (Berl). 2000 Oct;202(4):313-21.
PMID: 11000282 [PubMed - indexed for MEDLINE]


 **214:** [Behar TN, Schaffner AE, Scott CA, Greene CL, Barker JL.](#)

[Related Articles, Links](#)



GABA receptor antagonists modulate postmitotic cell migration in slice cultures of embryonic rat cortex.

Cereb Cortex. 2000 Sep;10(9):899-909.
PMID: 10982750 [PubMed - indexed for MEDLINE]


 **215:** [Palmer TD, Willhoite AR, Gage FH.](#)

[Related Articles, Links](#)



Vascular niche for adult hippocampal neurogenesis.

J Comp Neurol. 2000 Oct 2;425(4):479-94.
PMID: 10975875 [PubMed - indexed for MEDLINE]

 **216:** [Qin J, Mizuguchi M, Itoh M, Takashima S.](#)

[Related Articles, Links](#)



A novel migration-related gene product, doublecortin, in neuronal migration disorder of fetuses and infants with Zellweger syndrome.

Acta Neuropathol (Berl). 2000 Aug;100(2):168-73.
PMID: 10963364 [PubMed - indexed for MEDLINE]





















 **217:** [Menet V, Gimenez Y, Ribotta M, Sandillon F, Privat A.](#)

[Related Articles, Links](#)




GFAP null astrocytes are a favorable substrate for neuronal survival and neurite growth.

Glia. 2000 Sep;31(3):267-72.
PMID: 10941153 [PubMed - indexed for MEDLINE]

-  **218:** [Woodbury D, Schwarz EJ, Prockop DJ, Black IB.](#) [Related Articles, Links](#)
 **Adult rat and human bone marrow stromal cells differentiate into neurons.**
J Neurosci Res. 2000 Aug 15;61(4):364-70.
PMID: 10931522 [PubMed - indexed for MEDLINE]
-  **219:** [Maric D, Maric I, Chang YH, Barker JL.](#) [Related Articles, Links](#)
 **Stereotypical physiological properties emerge during early neuronal and glial lineage development in the embryonic rat neocortex.**
Cereb Cortex. 2000 Aug;10(8):729-47.
PMID: 10920046 [PubMed - indexed for MEDLINE]
-  **220:** [Learish RD, Bruss MD, Haak-Frendscho M.](#) [Related Articles, Links](#)
 **Inhibition of mitogen-activated protein kinase kinase blocks proliferation of neural progenitor cells.**
Brain Res Dev Brain Res. 2000 Jul 30;122(1):97-109.
PMID: 10915910 [PubMed - indexed for MEDLINE]
-  **221:** [Jacobs JS, Miller MW.](#) [Related Articles, Links](#)
 **Cell cycle kinetics and immunohistochemical characterization of dissociated fetal neocortical cultures: evidence that differentiated neurons have mitotic capacity.**
Brain Res Dev Brain Res. 2000 Jul 30;122(1):67-80.
PMID: 10915906 [PubMed - indexed for MEDLINE]
-  **222:** [Sanchez-Ramos J, Song S, Cardozo-Pelaez F, Hazzi C, Stedeford T, Willing A, Freeman TB, Saporta S, Janssen W, Patel N, Cooper DR, Sanberg PR.](#) [Related Articles, Links](#)
 **Adult bone marrow stromal cells differentiate into neural cells in vitro.**
Exp Neurol. 2000 Aug;164(2):247-56.
PMID: 10915564 [PubMed - indexed for MEDLINE]
-  **223:** [Piper DR, Mujtaba T, Rao MS, Lucero MT.](#) [Related Articles, Links](#)
 **Immunocytochemical and physiological characterization of a population of cultured human neural precursors.**
J Neurophysiol. 2000 Jul;84(1):534-48.
PMID: 10899225 [PubMed - indexed for MEDLINE]
-  **224:** [Palm K, Salin-Nordstrom T, Levesque MF, Neuman T.](#) [Related Articles, Links](#)
 **Fetal and adult human CNS stem cells have similar molecular characteristics and developmental potential.**
Brain Res Mol Brain Res. 2000 May 31;78(1-2):192-5.
PMID: 10891600 [PubMed - indexed for MEDLINE]
-  **225:** [Yamaguchi M, Saito H, Suzuki M, Mori K.](#) [Related Articles, Links](#)
 **Visualization of neurogenesis in the central nervous system using nestin promoter-GFP transgenic mice.**
Neuroreport. 2000 Jun 26;11(9):1991-6.
PMID: 10884058 [PubMed - indexed for MEDLINE]
-  **226:** [Rubio FJ, Bueno C, Villa A, Navarro B, Martinez-Serrano A.](#) [Related Articles, Links](#)
 **Genetically perpetuated human neural stem cells engraft and differentiate into the adult mammalian brain.**
Mol Cell Neurosci. 2000 Jul;16(1):1-13.
PMID: 10882478 [PubMed - indexed for MEDLINE]
-  **227:** [Zhou FC, Kelley MR, Chiang YH, Young P.](#) [Related Articles, Links](#)
 **Three to four-year-old nonpassaged EGF-responsive neural progenitor**

cells: proliferation, apoptosis, and DNA repair.
Exp Neurol. 2000 Jul;164(1):200-8.
PMID: 10877930 [PubMed - indexed for MEDLINE]


 **228:** [Sato M, Yoshida T.](#)

[Related Articles](#), [Links](#)



Expression of neural properties in olfactory cytokeratin-positive basal cell line.

Brain Res Dev Brain Res. 2000 Jun 30;121(2):219-22.
PMID: 10876035 [PubMed - indexed for MEDLINE]


 **229:** [Coronas V, Durand M, Chabot JG, Jourdan F, Quirion R.](#)

[Related Articles](#), [Links](#)



Acetylcholine induces neuritic outgrowth in rat primary olfactory bulb cultures.

Neuroscience. 2000;98(2):213-9.
PMID: 10854752 [PubMed - indexed for MEDLINE]


 **230:** [Kanno H, Saljooque F, Yamamoto I, Hattori S, Yao M, Shuin T.](#)

[Related Articles](#), [Links](#)



UHS
Role of the von Hippel-Lindau tumor suppressor protein during neuronal differentiation.

Cancer Res. 2000 Jun 1;60(11):2820-4.
PMID: 10850421 [PubMed - indexed for MEDLINE]


 **231:** [Amoureux MC, Cunningham BA, Edelman GM, Crossin KL.](#)

[Related Articles](#), [Links](#)



N-CAM binding inhibits the proliferation of hippocampal progenitor cells and promotes their differentiation to a neuronal phenotype.

J Neurosci. 2000 May 15;20(10):3631-40.
PMID: 10804205 [PubMed - indexed for MEDLINE]


 **232:** [Bernier PJ, Vinet J, Cossette M, Parent A.](#)

[Related Articles](#), [Links](#)



Characterization of the subventricular zone of the adult human brain: evidence for the involvement of Bcl-2.

Neurosci Res. 2000 May;37(1):67-78.
PMID: 10802345 [PubMed - indexed for MEDLINE]


 **233:** [Qin J, Mizuguchi M, Itoh M, Takashima S.](#)

[Related Articles](#), [Links](#)



Immunohistochemical expression of doublecortin in the human cerebrum: comparison of normal development and neuronal migration disorders.

Brain Res. 2000 Apr 28;863(1-2):225-32.
PMID: 10773210 [PubMed - indexed for MEDLINE]


 **234:** [Rozental R, Srinivas M, Gokhan S, Urban M, Dermietzel R, Kessler JA, Spray DC, Mehler MF.](#)

[Related Articles](#), [Links](#)



Temporal expression of neuronal connexins during hippocampal ontogeny.

Brain Res Brain Res Rev. 2000 Apr;32(1):57-71. Review.
PMID: 10751657 [PubMed - indexed for MEDLINE]


 **235:** [Mouillet-Richard S, Mutel V, Loric S, Toumois C, Launay JM, Kellermann O.](#)

[Related Articles](#), [Links](#)



Regulation by neurotransmitter receptors of serotonergic or catecholaminergic neuronal cell differentiation.

J Biol Chem. 2000 Mar 31;275(13):9186-92.
PMID: 10734054 [PubMed - indexed for MEDLINE]

 **236:** [Troppe V, Coles BL, Chiasson BJ, Horsford DJ, Elia AJ, McInnes RR, van der Kooy D.](#)

[Related Articles](#), [Links](#)



Retinal stem cells in the adult mammalian eye.

Science. 2000 Mar 17;287(5460):2032-6.

PMID: 10720333 [PubMed - indexed for MEDLINE]

-  **237:** [Boutou E, Hurel C, Matsas R.](#) [Related Articles, Links](#)



Early expression of the BM88 antigen during neuronal differentiation of P19 embryonal carcinoma cells.

Int J Dev Neurosci. 2000 Apr-Jun;18(2-3):321-8.

PMID: 10715587 [PubMed - indexed for MEDLINE]


-  **238:** [Vicario-Abejon C, Collin C, Tsoulfas P, McKay RD.](#) [Related Articles, Links](#)



Hippocampal stem cells differentiate into excitatory and inhibitory neurons.

Eur J Neurosci. 2000 Feb;12(2):677-88.

PMID: 10712648 [PubMed - indexed for MEDLINE]


-  **239:** [Roy NS, Wang S, Jiang L, Kang J, Benraiss A, Harrison-Restelli C, Fraser RA, Couldwell WT, Kawaguchi A, Okano H, Nedergaard M, Goldman SA.](#) [Related Articles, Links](#)



In vitro neurogenesis by progenitor cells isolated from the adult human hippocampus.

Nat Med. 2000 Mar;6(3):271-7.

PMID: 10700228 [PubMed - indexed for MEDLINE]

-  **240:** [Zhang L, Chang YH, Barker JL, Hu Q, Maric D, Li BS, Rubinow DR.](#) [Related Articles, Links](#)



Testosterone and estrogen affect neuronal differentiation but not proliferation in early embryonic cortex of the rat: the possible roles of androgen and estrogen receptors.

Neurosci Lett. 2000 Mar 3;281(1):57-60.

PMID: 10686415 [PubMed - indexed for MEDLINE]


-  **241:** [Messam CA, Hou J, Major EO.](#) [Related Articles, Links](#)



Coexpression of nestin in neural and glial cells in the developing human CNS defined by a human-specific anti-nestin antibody.

Exp Neurol. 2000 Feb;161(2):585-96.

PMID: 10686078 [PubMed - indexed for MEDLINE]

-  **242:** [Villa A, Snyder EY, Vescovi A, Martinez-Serrano A.](#) [Related Articles, Links](#)



Establishment and properties of a growth factor-dependent, perpetual neural stem cell line from the human CNS.

Exp Neurol. 2000 Jan;161(1):67-84.

PMID: 10683274 [PubMed - indexed for MEDLINE]


-  **243:** [Pardo B, Honegger P.](#) [Related Articles, Links](#)



Differentiation of rat striatal embryonic stem cells in vitro: monolayer culture vs. three-dimensional coculture with differentiated brain cells.

J Neurosci Res. 2000 Feb 15;59(4):504-12.

PMID: 10679789 [PubMed - indexed for MEDLINE]


-  **244:** [Roy NS, Benraiss A, Wang S, Fraser RA, Goodman R, Couldwell WT, Nedergaard M, Kawaguchi A, Okano H, Goldman SA.](#) [Related Articles, Links](#)



Promoter-targeted selection and isolation of neural progenitor cells from the adult human ventricular zone.

J Neurosci Res. 2000 Feb 1;59(3):321-31.


PMID: 10679767 [PubMed - indexed for MEDLINE]

-  **245:** [Chacko DM, Rogers JA, Turner JE, Ahmad I.](#) [Related Articles, Links](#)



Survival and differentiation of cultured retinal progenitors transplanted in the subretinal space of the rat.


Biochem Biophys Res Commun. 2000 Feb 24;268(3):842-6.
PMID: 10679293 [PubMed - indexed for MEDLINE]

-  **246:** [Kaneko Y, Sakakibara S, Imai T, Suzuki A, Nakamura Y, Sawamoto K, Ogawa Y, Toyama Y, Miyata T, Okano H](#) [Related Articles, Links](#)



Musashi1: an evolutionally conserved marker for CNS progenitor cells including neural stem cells.

Dev Neurosci. 2000;22(1-2):139-53.
PMID: 10657706 [PubMed - indexed for MEDLINE]

-  **247:** [Levison SW, Rothstein RP, Brazel CY, Young GM, Albrecht PJ](#) [Related Articles, Links](#)



Selective apoptosis within the rat subependymal zone: a plausible mechanism for determining which lineages develop from neural stem cells.

Dev Neurosci. 2000;22(1-2):106-15.
PMID: 10657703 [PubMed - indexed for MEDLINE]

-  **248:** [Linnarsson S, Willson CA, Ernfrors P](#) [Related Articles, Links](#)



Cell death in regenerating populations of neurons in BDNF mutant mice.


Brain Res Mol Brain Res. 2000 Jan 10;75(1):61-9.
PMID: 10648888 [PubMed - indexed for MEDLINE]

-  **249:** [Kong LW, Ding XY, Kitani H, Shiurba R, Jing NH](#) [Related Articles, Links](#)



Evidence for a mouse brain-specific variant of alpha-tubulin.

Cell Res. 1999 Dec;9(4):315-25.
PMID: 10628840 [PubMed - indexed for MEDLINE]

-  **250:** [Nakamura Y, Sakakibara S, Miyata T, Ogawa M, Shimazaki T, Weiss S, Kageyama R, Okano H](#) [Related Articles, Links](#)



The bHLH gene hes1 as a repressor of the neuronal commitment of CNS stem cells.


J Neurosci. 2000 Jan 1;20(1):283-93.
PMID: 10627606 [PubMed - indexed for MEDLINE]

-  **251:** [Park JK, Williams BP, Alberta JA, Stiles CD](#) [Related Articles, Links](#)



Bipotent cortical progenitor cells process conflicting cues for neurons and glia in a hierarchical manner.

J Neurosci. 1999 Dec 1;19(23):10383-9.
PMID: 10575035 [PubMed - indexed for MEDLINE]

-  **252:** [Clarkson ED, Edwards-Prasad J, Freed CR, Prasad KN](#) [Related Articles, Links](#)



Immortalized dopamine neurons: A model to study neurotoxicity and neuroprotection.


Proc Soc Exp Biol Med. 1999 Nov;222(2):157-63.
PMID: 10564540 [PubMed - indexed for MEDLINE]

-  **253:** [Kilty IC, Barraclough R, Schmidt G, Rudland PS](#) [Related Articles, Links](#)



Isolation of a potential neural stem cell line from the internal capsule of an adult transgenic rat brain.




















J Neurochem. 1999 Nov;73(5):1859-70.
PMID: 10537044 [PubMed - indexed for MEDLINE]




















-  **254:** [Colucci-D'Amato GL, Tino A, Pernas-Alonso R, French-Mullen JM, di Porzio U](#) [Related Articles, Links](#)







































Neuronal and glial properties coexist in a novel mouse CNS immortalized cell line.





















Exp Cell Res. 1999 Nov 1;252(2):383-91.
PMID: 10527628 [PubMed - indexed for MEDLINE]

-  **255:** [Zhu G, Mehler MF, Zhao J, Yu Yung S, Kessler JA.](#) [Related Articles, Links](#)
 **Sonic hedgehog and BMP2 exert opposing actions on proliferation and differentiation of embryonic neural progenitor cells.**
Dev Biol. 1999 Nov 1;215(1):118-29.
PMID: 10525354 [PubMed - indexed for MEDLINE]
-  **256:** [Kato T, Yokouchi K, Li Z, Fukushima N, Kawagishi K, Moriizumi T.](#) [Related Articles, Links](#)
 **Calretinin-immunoreactive neurons in rostral migratory stream: neuronal differentiation.**
Neuroreport. 1999 Sep 9;10(13):2769-72.
PMID: 10511437 [PubMed - indexed for MEDLINE]
-  **257:** [Kornblum HL, Zurcher SD, Werb Z, Derynck R, Seroogy KB.](#) [Related Articles, Links](#)
 **Multiple trophic actions of heparin-binding epidermal growth factor (HB-EGF) in the central nervous system.**
Eur J Neurosci. 1999 Sep;11(9):3236-46.
PMID: 10510187 [PubMed - indexed for MEDLINE]
-  **258:** [Brewer GJ.](#) [Related Articles, Links](#)
 **Regeneration and proliferation of embryonic and adult rat hippocampal neurons in culture.**
Exp Neurol. 1999 Sep;159(1):237-47.
PMID: 10486191 [PubMed - indexed for MEDLINE]
-  **259:** [Quinn SM, Walters WM, Vescovi AL, Whittemore SR.](#) [Related Articles, Links](#)
 **Lineage restriction of neuroepithelial precursor cells from fetal human spinal cord.**
J Neurosci Res. 1999 Sep 1;57(5):590-602.
PMID: 10462684 [PubMed - indexed for MEDLINE]
-  **260:** [Ahmad I, Dooley CM, Thoreson WB, Rogers JA, Afiat S.](#) [Related Articles, Links](#)
 **In vitro analysis of a mammalian retinal progenitor that gives rise to neurons and glia.**
Brain Res. 1999 Jun 12;831(1-2):1-10.
PMID: 10411978 [PubMed - indexed for MEDLINE]
-  **261:** [Tatebayashi Y, Iqbal K, Grundke-Iqbal I.](#) [Related Articles, Links](#)
 **Dynamic regulation of expression and phosphorylation of tau by fibroblast growth factor-2 in neural progenitor cells from adult rat hippocampus.**
J Neurosci. 1999 Jul 1;19(13):5245-54.
PMID: 10377336 [PubMed - indexed for MEDLINE]
-  **262:** [Wang T, FitzGerald TJ, Haregewoin A.](#) [Related Articles, Links](#)
 **Differential expression of nitric oxide synthases in EGF-responsive mouse neural precursor cells.**
Cell Tissue Res. 1999 Jun;296(3):489-97.
PMID: 10370135 [PubMed - indexed for MEDLINE]
-  **263:** [Renoncourt Y, Carroll P, Filippi P, Arce V, Alonso S.](#) [Related Articles, Links](#)
 **Neurons derived in vitro from ES cells express homeoproteins characteristic of motoneurons and interneurons.**
Mech Dev. 1998 Dec;79(1-2):185-97.
PMID: 10349632 [PubMed - indexed for MEDLINE]
-  **264:** [Ohsawa I, Takamura C, Morimoto T, Ishiguro M, Kohsaka S.](#) [Related Articles, Links](#)


-  Amino-terminal region of secreted form of amyloid precursor protein stimulates proliferation of neural stem cells.
Eur J Neurosci. 1999 Jun;11(6):1907-13.
PMID: 10336659 [PubMed - indexed for MEDLINE]
-  **265:** [Kukekov VG, Laywell ED, Suslov O, Davies K, Scheffler B, Thomas LB, O'Brien TF, Kusakabe M, Steindler DA.](#) [Related Articles, Links](#)
[Thomas LB, O'Brien TF, Kusakabe M, Steindler DA.](#)
-  Multipotent stem/progenitor cells with similar properties arise from two neurogenic regions of adult human brain.
Exp Neurol. 1999 Apr;156(2):333-44.
PMID: 10328940 [PubMed - indexed for MEDLINE]
-  **266:** [Bittman KS, LoTurco JJ.](#) [Related Articles, Links](#)
-  Differential regulation of connexin 26 and 43 in murine neocortical precursors.
Cereb Cortex. 1999 Mar;9(2):188-95.
PMID: 10220231 [PubMed - indexed for MEDLINE]
-  **267:** [Domercq M, Matute C.](#) [Related Articles, Links](#)
-  Expression of glutamate transporters in the adult bovine corpus callosum.
Brain Res Mol Brain Res. 1999 Apr 20;67(2):296-302.
PMID: 10216228 [PubMed - indexed for MEDLINE]
-  **268:** [Ringstedt T, Ibanez CF, Nosrat CA.](#) [Related Articles, Links](#)
-  Role of brain-derived neurotrophic factor in target invasion in the gustatory system.
J Neurosci. 1999 May 1;19(9):3507-18.
PMID: 10212310 [PubMed - indexed for MEDLINE]
-  **269:** [Bani-Yaghoob M, Bechberger JF, Underhill TM, Naus CC.](#) [Related Articles, Links](#)
-  The effects of gap junction blockage on neuronal differentiation of human NTera2/clone D1 cells.
Exp Neurol. 1999 Mar;156(1):16-32.
PMID: 10192774 [PubMed - indexed for MEDLINE]
-  **270:** [Canoll PD, Kraemer R, Teng KK, Marchionni MA, Salzer JL.](#) [Related Articles, Links](#)
-  GGF/neuregulin induces a phenotypic reversion of oligodendrocytes.
Mol Cell Neurosci. 1999 Feb;13(2):79-94.
PMID: 10192767 [PubMed - indexed for MEDLINE]
-  **271:** [Troppe V, Sibilio M, Ciruna BG, Rossant J, Wagner EF, van der Kooy D.](#) [Related Articles, Links](#)
-  Distinct neural stem cells proliferate in response to EGF and FGF in the developing mouse telencephalon.
Dev Biol. 1999 Apr 1;208(1):166-88.
PMID: 10075850 [PubMed - indexed for MEDLINE]
-  **272:** [Fanarraga ML, Avila J, Zabala JC.](#) [Related Articles, Links](#)
-  Expression of unphosphorylated class III beta-tubulin isotype in neuroepithelial cells demonstrates neuroblast commitment and differentiation.
Eur J Neurosci. 1999 Feb;11(2):517-27.
PMID: 10073918 [PubMed - indexed for MEDLINE]
-  **273:** [Cheng A, Krueger BK, Bambrick LL.](#) [Related Articles, Links](#)
-  MAP5 expression in proliferating neuroblasts.
Brain Res Dev Brain Res. 1999 Mar 12;113(1-2):107-13.
PMID: 10064880 [PubMed - indexed for MEDLINE]

-  **274:** [Gloster A, El-Bizri H, Bamji SX, Rogers D, Miller FD.](#) [Related Articles, Links](#)
 **Early induction of Talpha1 alpha-tubulin transcription in neurons of the developing nervous system.**
J Comp Neurol. 1999 Mar 1;405(1):45-60.
PMID: 10022195 [PubMed - indexed for MEDLINE]
-  **275:** [Yaworsky PJ, Kappen C.](#) [Related Articles, Links](#)
 **Heterogeneity of neural progenitor cells revealed by enhancers in the nestin gene.**
Dev Biol. 1999 Jan 15;205(2):309-21.
PMID: 9917366 [PubMed - indexed for MEDLINE]
-  **276:** [Shimazaki T, Arsenijevic Y, Ryan AK, Rosenfeld MG, Weiss S.](#) [Related Articles, Links](#)
 **A role for the POU-III transcription factor Brn-4 in the regulation of striatal neuron precursor differentiation.**
EMBO J. 1999 Jan 15;18(2):444-56.
PMID: 9889200 [PubMed - indexed for MEDLINE]
-  **277:** [Chalazonitis A, Rothman TP, Chen J, Gershon MD.](#) [Related Articles, Links](#)
 **Age-dependent differences in the effects of GDNF and NT-3 on the development of neurons and glia from neural crest-derived precursors immunoselected from the fetal rat gut: expression of GFRalpha-1 in vitro and in vivo.**
Dev Biol. 1998 Dec 15;204(2):385-406.
PMID: 9882478 [PubMed - indexed for MEDLINE]
-  **278:** [Santacana M, Uttenthal LO, Bentura ML, Fernandez AP, Serrano J, Martinez de Velasco J, Alonso D, Martinez-Murillo R, Rodrigo J.](#) [Related Articles, Links](#)
 **Expression of neuronal nitric oxide synthase during embryonic development of the rat cerebral cortex.**
Brain Res Dev Brain Res. 1998 Dec 7;111(2):205-22.
PMID: 9838118 [PubMed - indexed for MEDLINE]
-  **279:** [Zhou FC, Chiang YH.](#) [Related Articles, Links](#)
 **Long-term nonpassaged EGF-responsive neural precursor cells are stem cells.**
Wound Repair Regen. 1998 Jul-Aug;6(4):337-48.
PMID: 9824552 [PubMed - indexed for MEDLINE]
-  **280:** [Kong LW, Shen Q, Ding XY, Hiroshi K, Jing NH.](#) [Related Articles, Links](#)
 **[An antibody recognizing neuron specific tubulin]**
Sheng Li Xue Bao. 1997 Aug;49(4):361-9. Chinese.
PMID: 9812865 [PubMed - indexed for MEDLINE]
-  **281:** [Jung M, Kramer EM, Muller T, Antonicek H, Trotter J.](#) [Related Articles, Links](#)
 **Novel pluripotential neural progenitor lines exhibiting rapid controlled differentiation to neurotransmitter receptor-expressing neurons and glia.**
Eur J Neurosci. 1998 Oct;10(10):3246-56.
PMID: 9786218 [PubMed - indexed for MEDLINE]
-  **282:** [Hardy RJ.](#) [Related Articles, Links](#)
 **QKI expression is regulated during neuron-glial cell fate decisions.**
J Neurosci Res. 1998 Oct 1;54(1):46-57.
PMID: 9778149 [PubMed - indexed for MEDLINE]
-  **283:** [Ciccolini F, Svendsen CN.](#) [Related Articles, Links](#)

-  **Fibroblast growth factor 2 (FGF-2) promotes acquisition of epidermal growth factor (EGF) responsiveness in mouse striatal precursor cells: identification of neural precursors responding to both EGF and FGF-2.**
J Neurosci. 1998 Oct 1;18(19):7869-80.
PMID: 9742155 [PubMed - indexed for MEDLINE]
-  **284:** [Ali SA, Pappas IS, Parnavelas JG.](#) [Related Articles, Links](#)
-  **Collagen type IV promotes the differentiation of neuronal progenitors and inhibits astroglial differentiation in cortical cell cultures.**
Brain Res Dev Brain Res. 1998 Sep 10;110(1):31-8.
PMID: 9733911 [PubMed - indexed for MEDLINE]
-  **285:** [Ringstedt T, Linnarsson S, Wagner J, Lendahl U, Kokaia Z, Arenas E, Ernfors P, Ibanez CF.](#) [Related Articles, Links](#)
-  **BDNF regulates reelin expression and Cajal-Retzius cell development in the cerebral cortex.**
Neuron. 1998 Aug;21(2):305-15.
PMID: 9728912 [PubMed - indexed for MEDLINE]
-  **286:** [Forsberg-Nilsson K, Behar TN, Afrakhte M, Barker JL, McKay RD.](#) [Related Articles, Links](#)
-  **Platelet-derived growth factor induces chemotaxis of neuroepithelial stem cells.**
J Neurosci Res. 1998 Sep 1;53(5):521-30.
PMID: 9726423 [PubMed - indexed for MEDLINE]
-  **287:** [Behar TN, Schaffner AE, Scott CA, O'Connell C, Barker JL.](#) [Related Articles, Links](#)
-  **Differential response of cortical plate and ventricular zone cells to GABA as a migration stimulus.**
J Neurosci. 1998 Aug 15;18(16):6378-87.
PMID: 9698329 [PubMed - indexed for MEDLINE]
-  **288:** [Chalazonitis A, Rothman TP, Chen J, Vinson EN, MacLennan AJ, Gershon MD.](#) [Related Articles, Links](#)
-  **Promotion of the development of enteric neurons and glia by neurotrophic cytokines: interactions with neurotrophin-3.**
Dev Biol. 1998 Jun 15;198(2):343-65.
PMID: 9659938 [PubMed - indexed for MEDLINE]
-  **289:** [Winkler C, Fricker RA, Gates MA, Olsson M, Hammang JP, Carpenter MK, Bjorklund A.](#) [Related Articles, Links](#)
-  **Incorporation and glial differentiation of mouse EGF-responsive neural progenitor cells after transplantation into the embryonic rat brain.**
Mol Cell Neurosci. 1998 Jun;11(3):99-116.
PMID: 9647689 [PubMed - indexed for MEDLINE]
-  **290:** [Scherer SE, Gallo V.](#) [Related Articles, Links](#)
-  **Expression and regulation of kainate and AMPA receptors in the rat neural tube.**
J Neurosci Res. 1998 May 1;52(3):356-68.
PMID: 9590444 [PubMed - indexed for MEDLINE]
-  **291:** [Pekny M, Eliasson C, Chien CL, Kindblom LG, Liem R, Hamberger A, Betsholtz C.](#) [Related Articles, Links](#)
-  **GFAP-deficient astrocytes are capable of stellation in vitro when cocultured with neurons and exhibit a reduced amount of intermediate filaments and an increased cell saturation density.**
Exp Cell Res. 1998 Mar 15;239(2):332-43.
PMID: 9521851 [PubMed - indexed for MEDLINE]

-  **292:** [Kirsch M, Schulz-Key S, Wiese A, Fuhrmann S, Hofmann H.](#) [Related Articles, Links](#)
 Ciliary neurotrophic factor blocks rod photoreceptor differentiation from postmitotic precursor cells in vitro.
Cell Tissue Res. 1998 Feb;291(2):207-16.
PMID: 9426308 [PubMed - indexed for MEDLINE]
-  **293:** [Eaker EY, Sallustio JE.](#) [Related Articles, Links](#)
 Myenteric plexus neurons in culture: developmental changes in neurofilament and related proteins.
Dig Dis Sci. 1998 Feb;43(2):270-8.
PMID: 9512118 [PubMed - indexed for MEDLINE]
-  **294:** [Ling ZD, Potter ED, Lipton JW, Carvey PM.](#) [Related Articles, Links](#)
 Differentiation of mesencephalic progenitor cells into dopaminergic neurons by cytokines.
Exp Neurol. 1998 Feb;149(2):411-23.
PMID: 9500954 [PubMed - indexed for MEDLINE]
-  **295:** [Murray K, Dubois-Dalcq M.](#) [Related Articles, Links](#)
 Emergence of oligodendrocytes from human neural spheres.
J Neurosci Res. 1997 Oct 15;50(2):146-56.
PMID: 9373025 [PubMed - indexed for MEDLINE]
-  **296:** [Fanarraga ML, Milward EA.](#) [Related Articles, Links](#)
 Characterization of a putative novel type of oligodendrocyte in cultures from rat spinal cord.
Eur J Neurosci. 1997 Oct;9(10):2213-7.
PMID: 9421182 [PubMed - indexed for MEDLINE]
-  **297:** [Kukekov VG, Laywell ED, Thomas LB, Steindler DA.](#) [Related Articles, Links](#)
 A nestin-negative precursor cell from the adult mouse brain gives rise to neurons and glia.
Glia. 1997 Dec;21(4):399-407.
PMID: 9419015 [PubMed - indexed for MEDLINE]
-  **298:** [Milward EA, Lundberg CG, Ge B, Lipsitz D, Zhao M, Duncan ID.](#) [Related Articles, Links](#)
 Isolation and transplantation of multipotential populations of epidermal growth factor-responsive, neural progenitor cells from the canine brain.
J Neurosci Res. 1997 Dec 1;50(5):862-71.
PMID: 9418973 [PubMed - indexed for MEDLINE]
-  **299:** [Meltzer H, Hatton JD, Sang UH.](#) [Related Articles, Links](#)
 Cell type-specific development of rodent central nervous system progenitor cells in culture.
J Neurosurg. 1998 Jan;88(1):93-8.
PMID: 9420078 [PubMed - indexed for MEDLINE]
-  **300:** [Schlett K, Herberth B, Madarasz E.](#) [Related Articles, Links](#)
 In vitro pattern formation during neurogenesis in neuroectodermal progenitor cells immortalized by p53-deficiency.
Int J Dev Neurosci. 1997 Oct;15(6):795-804.
PMID: 9402230 [PubMed - indexed for MEDLINE]
-  **301:** [Hulspar R, Tiarks C, Reilly J, Hsieh CC, Recht L, Quesenberry PJ.](#) [Related Articles, Links](#)
 In vitro cell density-dependent clonal growth of EGF-responsive murine neural progenitor cells under serum-free conditions.

Exp Neurol. 1997 Nov;148(1):147-56.
PMID: 9398457 [PubMed - indexed for MEDLINE]

-  **302:** [Shinmura Y, Aiba-Masago S, Kosugi I, Li RY, Baba S, Tsutsui Y.](#) [Related Articles, Links](#)



Differential expression of the immediate-early and early antigens in neuronal and glial cells of developing mouse brains infected with murine cytomegalovirus.


Am J Pathol. 1997 Nov;151(5):1331-40.
PMID: 9358759 [PubMed - indexed for MEDLINE]

-  **303:** [Khoddami M, Becker LE.](#) [Related Articles, Links](#)



Immunohistochemistry of medulloepithelioma and neural tube.


Pediatr Pathol Lab Med. 1997 Nov-Dec;17(6):913-25.
PMID: 9353831 [PubMed - indexed for MEDLINE]

-  **304:** [Lavdas AA, Blue ME, Lincoln J, Parnavelas JG.](#) [Related Articles, Links](#)



Serotonin promotes the differentiation of glutamate neurons in organotypic slice cultures of the developing cerebral cortex.

J Neurosci. 1997 Oct 15;17(20):7872-80.
PMID: 9315907 [PubMed - indexed for MEDLINE]

-  **305:** [Yamanouchi H, Jay V, Rutka JT, Takashima S, Becker LE.](#) [Related Articles, Links](#)



Evidence of abnormal differentiation in giant cells of tuberous sclerosis.


Pediatr Neurol. 1997 Jul;17(1):49-53.
PMID: 9308976 [PubMed - indexed for MEDLINE]

-  **306:** [Hammang JP, Archer DR, Duncan ID.](#) [Related Articles, Links](#)



Myelination following transplantation of EGF-responsive neural stem cells into a myelin-deficient environment.

Exp Neurol. 1997 Sep;147(1):84-95.
PMID: 9294405 [PubMed - indexed for MEDLINE]

-  **307:** [Ringstedt T, Kucera J, Lendahl U, Ernfors P, Ibanez CF.](#) [Related Articles, Links](#)



Limb proprioceptive deficits without neuronal loss in transgenic mice overexpressing neurotrophin-3 in the developing nervous system.

Development. 1997 Jul;124(13):2603-13.
PMID: 9217002 [PubMed - indexed for MEDLINE]

-  **308:** [Maleski M, Hockfield S.](#) [Related Articles, Links](#)



Glial cells assemble hyaluronan-based pericellular matrices in vitro.


Glia. 1997 Jul;20(3):193-202.
PMID: 9215728 [PubMed - indexed for MEDLINE]

-  **309:** [Kalyani A, Hobson K, Rao MS.](#) [Related Articles, Links](#)



Neuroepithelial stem cells from the embryonic spinal cord: isolation, characterization, and clonal analysis.


Dev Biol. 1997 Jun 15;186(2):202-23.
PMID: 9205140 [PubMed - indexed for MEDLINE]



















-  **310:** [Lundberg C, Martinez-Serrano A, Cattaneo E, McKay RD, Bjorklund A.](#) [Related Articles, Links](#)























Survival, integration, and differentiation of neural stem cell lines after transplantation to the adult rat striatum.

Exp Neurol. 1997 Jun;145(2 Pt 1):342-60.
PMID: 9217071 [PubMed - indexed for MEDLINE]

-  **311:** [Onifer SM, Cannon AB, Whittemore SR.](#) [Related Articles, Links](#)

-  **Altered differentiation of CNS neural progenitor cells after transplantation into the injured adult rat spinal cord.**
Cell Transplant. 1997 May-Jun;6(3):327-38.
PMID: 9171165 [PubMed - indexed for MEDLINE]
-  **312:** [Levison SW, Goldman JE.](#) [Related Articles, Links](#)
-  **Multipotential and lineage restricted precursors coexist in the mammalian perinatal subventricular zone.**
J Neurosci Res. 1997 Apr 15;48(2):83-94.
PMID: 9130137 [PubMed - indexed for MEDLINE]
-  **313:** [Seidman KJ, Teng AL, Rosenkopf R, Spilotro P, Weyhenmeyer JA.](#) [Related Articles, Links](#)
-  **Isolation, cloning and characterization of a putative type-1 astrocyte cell line.**
Brain Res. 1997 Apr 4;753(1):18-26.
PMID: 9125427 [PubMed - indexed for MEDLINE]
-  **314:** [Weggen S, Bayer TA, Koch A, Salewski H, Scheidtmann KH, Pietsch T, Wiestler OD.](#) [Related Articles, Links](#)
-  **Characterization of neural cell lines derived from SV40 large T-induced primitive neuroectodermal tumors.**
Brain Pathol. 1997 Apr;7(2):731-9.
PMID: 9161724 [PubMed - indexed for MEDLINE]
-  **315:** [Hagino-Yamagishi K, Saijoh Y, Ikeda M, Ichikawa M, Minamikawa-Tachino R, Hamada H.](#) [Related Articles, Links](#)
-  **Predominant expression of Brn-2 in the postmitotic neurons of the developing mouse neocortex.**
Brain Res. 1997 Mar 28;752(1-2):261-8.
PMID: 9106466 [PubMed - indexed for MEDLINE]
-  **316:** [Lothian C, Lendahl U.](#) [Related Articles, Links](#)
-  **An evolutionarily conserved region in the second intron of the human nestin gene directs gene expression to CNS progenitor cells and to early neural crest cells.**
Eur J Neurosci. 1997 Mar;9(3):452-62.
PMID: 9104587 [PubMed - indexed for MEDLINE]
-  **317:** [Rosser AE, Tyers P, ter Borg M, Dunnett SB, Svendsen CN.](#) [Related Articles, Links](#)
-  **Co-expression of MAP-2 and GFAP in cells developing from rat EGF responsive precursor cells.**
Brain Res Dev Brain Res. 1997 Feb 20;98(2):291-5.
PMID: 9051273 [PubMed - indexed for MEDLINE]
-  **318:** [Schlett K, Madarasz E.](#) [Related Articles, Links](#)
-  **Retinoic acid induced neural differentiation in a neuroectodermal cell line immortalized by p53 deficiency.**
J Neurosci Res. 1997 Feb 15;47(4):405-15.
PMID: 9057134 [PubMed - indexed for MEDLINE]
-  **319:** [Fisher LJ.](#) [Related Articles, Links](#)
-  **Neural precursor cells: applications for the study and repair of the central nervous system.**
Neurobiol Dis. 1997;4(1):1-22. Review.
PMID: 9258907 [PubMed - indexed for MEDLINE]
-  **320:** [Lendahl U.](#) [Related Articles, Links](#)

-  **Transgenic analysis of central nervous system development and regeneration.**
Acta Anaesthesiol Scand Suppl. 1997;110:116-8.
PMID: 9248556 [PubMed - indexed for MEDLINE]
-  **321:** [Ho CL, Liem RK.](#) [Related Articles, Links](#)
-  **Intermediate filaments in the nervous system: implications in cancer.**
Cancer Metastasis Rev. 1996 Dec;15(4):483-97. Review.
PMID: 9034605 [PubMed - indexed for MEDLINE]
-  **322:** [Crino PB, Eberwine J.](#) [Related Articles, Links](#)
-  **Molecular characterization of the dendritic growth cone: regulated mRNA transport and local protein synthesis.**
Neuron. 1996 Dec;17(6):1173-87.
PMID: 8982164 [PubMed - indexed for MEDLINE]
-  **323:** [Crino PB, Trojanowski JQ, Dichter MA, Eberwine J.](#) [Related Articles, Links](#)
-  **Embryonic neuronal markers in tuberous sclerosis: single-cell molecular pathology.**
Proc Natl Acad Sci U S A. 1996 Nov 26;93(24):14152-7.
PMID: 8943076 [PubMed - indexed for MEDLINE]
-  **324:** [Pixley SK.](#) [Related Articles, Links](#)
-  **Characterization of olfactory receptor neurons and other cell types in dissociated rat olfactory cell cultures.**
Int J Dev Neurosci. 1996 Nov;14(7-8):823-39.
PMID: 9010728 [PubMed - indexed for MEDLINE]
-  **325:** [Shindler KS, Roth KA.](#) [Related Articles, Links](#)
-  **Double immunofluorescent staining using two unconjugated primary antisera raised in the same species.**
J Histochem Cytochem. 1996 Nov;44(11):1331-5.
PMID: 8918908 [PubMed - indexed for MEDLINE]
-  **326:** [Schinstine M, Iacovitti L.](#) [Related Articles, Links](#)
-  **Expression of neuronal antigens by astrocytes derived from EGF-generated neuroprogenitor cells.**
Exp Neurol. 1996 Sep;141(1):67-78.
PMID: 8797669 [PubMed - indexed for MEDLINE]
-  **327:** [Pavio N, Buc-Caron MH, Colbere-Garapin F.](#) [Related Articles, Links](#)
-  **Persistent poliovirus infection of human fetal brain cells.**
J Virol. 1996 Sep;70(9):6395-401.
PMID: 8709269 [PubMed - indexed for MEDLINE]
-  **328:** [elshamy WM, Ernfors P.](#) [Related Articles, Links](#)
-  **Requirement of neurotrophin-3 for the survival of proliferating trigeminal ganglion progenitor cells.**
Development. 1996 Aug;122(8):2405-14.
PMID: 8756286 [PubMed - indexed for MEDLINE]
-  **329:** [Donahue LM, Coates PW, Reinhart AJ.](#) [Related Articles, Links](#)
-  **Characterization of developmental stage and neuronal potential of the rat PNS-derived stem cell line, RT4-AC.**
Brain Res Dev Brain Res. 1996 Jun 14;94(1):67-80.
PMID: 8816279 [PubMed - indexed for MEDLINE]
-  **330:** [Hasgekar N, Saranath D, Seshadri R, Krishnaveni L, Ghosh S.](#) [Related Articles, Links](#)

Lalitha VS.



A neural precursor cell line derived from murine teratocarcinoma.
Int J Dev Biol. 1996 Jun;40(3):591-7.
PMID: 8840191 [PubMed - indexed for MEDLINE]

☐ **331:** Sheedlo HJ, Turner JE.

[Related Articles](#), [Links](#)



Influence of a retinal pigment epithelial cell factor(s) on rat retinal progenitor cells.
Brain Res Dev Brain Res. 1996 May 31;93(1-2):88-99.
PMID: 8804695 [PubMed - indexed for MEDLINE]

☐ **332:** Szele FG, Chesselet MF.

[Related Articles](#), [Links](#)



Cortical lesions induce an increase in cell number and PSA-NCAM expression in the subventricular zone of adult rats.
J Comp Neurol. 1996 May 6;368(3):439-54.
PMID: 8725350 [PubMed - indexed for MEDLINE]

☐ **333:** Adams FS, La Rosa FG, Kumar S, Edwards-Prasad J, Kentroti S, Vernadakis A, Freed CR, Prasad KN.

[Related Articles](#), [Links](#)



Characterization and transplantation of two neuronal cell lines with dopaminergic properties.
Neurochem Res. 1996 May;21(5):619-27.
PMID: 8726972 [PubMed - indexed for MEDLINE]

☐ **334:** Thomas LB, Gates MA, Steindler DA.

[Related Articles](#), [Links](#)



Young neurons from the adult subependymal zone proliferate and migrate along an astrocyte, extracellular matrix-rich pathway.
Glia. 1996 May;17(1):1-14.
PMID: 8723838 [PubMed - indexed for MEDLINE]

☐ **335:** Zhang KZ, Westberg JA, Holtta E, Andersson LC.

[Related Articles](#), [Links](#)



BCL2 regulates neural differentiation.
Proc Natl Acad Sci U S A. 1996 Apr 30;93(9):4504-8.
PMID: 8633098 [PubMed - indexed for MEDLINE]

☐ **336:** Craig CG, Tropepe V, Morshead CM, Reynolds BA, Weiss S, van der Kooy D.

[Related Articles](#), [Links](#)



In vivo growth factor expansion of endogenous subependymal neural precursor cell populations in the adult mouse brain.
J Neurosci. 1996 Apr 15;16(8):2649-58.
PMID: 8786441 [PubMed - indexed for MEDLINE]

☐ **337:** Shirai M, Miyashita A, Ishii N, Itoh Y, Satokata I, Watanabe YG, Kuwano R.

[Related Articles](#), [Links](#)



A gene trap strategy for identifying the gene expressed in the embryonic nervous system.
Zool Sci. 1996 Apr;13(2):277-83.
PMID: 8766926 [PubMed - indexed for MEDLINE]

☐ **338:** Arnold SE, Trojanowski JQ.

[Related Articles](#), [Links](#)



Human fetal hippocampal development: II. The neuronal cytoskeleton.
J Comp Neurol. 1996 Apr 1;367(2):293-307.
PMID: 8708011 [PubMed - indexed for MEDLINE]


☐ **339:** Frederiksen K, Thorpe A, Richards SJ, Waters J, Dunnett SB, Sandberg BE.

[Related Articles](#), [Links](#)



Immortalized neural cells from trisomy 16 mice as models for Alzheimer's disease.
Ann N Y Acad Sci. 1996 Jan 17;777:415-20.

PMID: 8624123 [PubMed - indexed for MEDLINE]


-  **340:** [Smits A, van Grieken D, Hartman M, Lendahl U, Funa K, Nister M.](#) [Related Articles, Links](#)



Coexpression of platelet-derived growth factor alpha and beta receptors on medulloblastomas and other primitive neuroectodermal tumors is consistent with an immature stem cell and neuronal derivation.

Lab Invest. 1996 Jan;74(1):188-98.

PMID: 8569181 [PubMed - indexed for MEDLINE]

-  **341:** [Lin P, Kusano K, Zhang Q, Felder CC, Geiger PM, Mahan LC.](#) [Related Articles, Links](#)



GABAA receptors modulate early spontaneous excitatory activity in differentiating P19 neurons.

J Neurochem. 1996 Jan;66(1):233-42.

PMID: 8522959 [PubMed - indexed for MEDLINE]


-  **342:** [Zerlin M, Levison SW, Goldman JE.](#) [Related Articles, Links](#)



Early patterns of migration, morphogenesis, and intermediate filament expression of subventricular zone cells in the postnatal rat forebrain.

J Neurosci. 1995 Nov;15(11):7238-49.

PMID: 7472478 [PubMed - indexed for MEDLINE]

-  **343:** [Gates MA, Thomas LB, Howard EM, Laywell ED, Sajin B, Faissner A, Gotz B, Silver J, Steindler DA.](#) [Related Articles, Links](#)



Cell and molecular analysis of the developing and adult mouse subventricular zone of the cerebral hemispheres.

J Comp Neurol. 1995 Oct 16;361(2):249-66.

PMID: 8543661 [PubMed - indexed for MEDLINE]


-  **344:** [Santa-Olalla J, Covarrubias L.](#) [Related Articles, Links](#)



Epidermal growth factor (EGF), transforming growth factor-alpha (TGF-alpha), and basic fibroblast growth factor (bFGF) differentially influence neural precursor cells of mouse embryonic mesencephalon.

J Neurosci Res. 1995 Oct 1;42(2):172-83. Erratum in: J Neurosci Res 1995 Dec 15;42(6):855.

PMID: 8568917 [PubMed - indexed for MEDLINE]

-  **345:** [Fruichard A, Chassande O, Bilbaut G, Dehay C, Savatier P, Samarut J.](#) [Related Articles, Links](#)



In vitro differentiation of embryonic stem cells into glial cells and functional neurons.

J Cell Sci. 1995 Oct;108 (Pt 10):3181-8.

PMID: 7593279 [PubMed - indexed for MEDLINE]

-  **346:** [Nakafuku M, Nakamura S.](#) [Related Articles, Links](#)



Establishment and characterization of a multipotential neural cell line that can conditionally generate neurons, astrocytes, and oligodendrocytes in vitro.

J Neurosci Res. 1995 Jun 1;41(2):153-68.

PMID: 7650751 [PubMed - indexed for MEDLINE]

-  **347:** [Duprey P, Paulin D.](#) [Related Articles, Links](#)





















What can be learned from intermediate filament gene regulation in the mouse embryo.

Int J Dev Biol. 1995 Jun;39(3):443-57. Review.

PMID: 7577435 [PubMed - indexed for MEDLINE]

-  **348:** [Buc-Caron MH.](#) [Related Articles, Links](#)

-  Neuroepithelial progenitor cells explanted from human fetal brain proliferate and differentiate in vitro.
Neurobiol Dis. 1995 Feb;2(1):37-47.
PMID: 8980007 [PubMed - indexed for MEDLINE]
-  **349:** Marone M, Quinones-Jenab V, Meiners S, Nowakowski RS, Ho SY, Geller HM. [Related Articles, Links](#)
-  An immortalized mouse neuroepithelial cell line with neuronal and glial phenotypes.
Dev Neurosci. 1995;17(5-6):311-23.
PMID: 8829920 [PubMed - indexed for MEDLINE]
-  **350:** Eaker EY, Sallustio JE. [Related Articles, Links](#)
-  The distribution of novel intermediate filament proteins defines subpopulations of myenteric neurons in rat intestine.
Gastroenterology. 1994 Sep;107(3):666-74.
PMID: 8076753 [PubMed - indexed for MEDLINE]
-  **351:** Zimmerman L, Parr B, Lendahl U, Cunningham M, McKay R, Gavin B, Mann J, Vassileva G, McMahon A. [Related Articles, Links](#)
-  Independent regulatory elements in the nestin gene direct transgene expression to neural stem cells or muscle precursors.
Neuron. 1994 Jan;12(1):11-24. Erratum in: Neuron 1994 Jun;12(6):following 1388.
PMID: 8292356 [PubMed - indexed for MEDLINE]
-  **352:** Sotelo C, Alvarado-Mallart RM, Frain M, Vernet M. [Related Articles, Links](#)
-  Molecular plasticity of adult Bergmann fibers is associated with radial migration of grafted Purkinje cells.
J Neurosci. 1994 Jan;14(1):124-33.
PMID: 8283229 [PubMed - indexed for MEDLINE]
-  **353:** Pleasure SJ, Lee VM. [Related Articles, Links](#)
-  NTERA 2 cells: a human cell line which displays characteristics expected of a human committed neuronal progenitor cell.
J Neurosci Res. 1993 Aug 15;35(6):585-602.
PMID: 8411264 [PubMed - indexed for MEDLINE]
-  **354:** Yachnis AT, Rorke LB, Lee VM, Trojanowski JQ. [Related Articles, Links](#)
-  Expression of neuronal and glial polypeptides during histogenesis of the human cerebellar cortex including observations on the dentate nucleus.
J Comp Neurol. 1993 Aug 15;334(3):356-69.
PMID: 7690783 [PubMed - indexed for MEDLINE]
-  **355:** Tohyama T, Lee VM, Rorke LB, Marvin M, McKay RD, Trojanowski JQ. [Related Articles, Links](#)
-  Monoclonal antibodies to a rat nestin fusion protein recognize a 220-kDa polypeptide in subsets of fetal and adult human central nervous system neurons and in primitive neuroectodermal tumor cells.
Am J Pathol. 1993 Jul;143(1):258-68.
PMID: 7686344 [PubMed - indexed for MEDLINE]
-  **356:** Whittemore SR, White LA. [Related Articles, Links](#)
-  Target regulation of neuronal differentiation in a temperature-sensitive cell line derived from medullary raphe.
Brain Res. 1993 Jun 25;615(1):27-40.
PMID: 8364724 [PubMed - indexed for MEDLINE]
-  **357:** Ma W, Bebar T, Maric D, Maric I, Barker JL. [Related Articles, Links](#)



Neuroepithelial cells in the rat spinal cord express glutamate decarboxylase immunoreactivity in vivo and in vitro.

J Comp Neurol. 1992 Nov 8;325(2):257-70.

PMID: 1460115 [PubMed - indexed for MEDLINE]

☐ **358:** [Reynolds BA, Tetzlaff W, Weiss S.](#)

[Related Articles](#), [Links](#)



A multipotent EGF-responsive striatal embryonic progenitor cell produces neurons and astrocytes.

J Neurosci. 1992 Nov;12(11):4565-74.

PMID: 1432110 [PubMed - indexed for MEDLINE]

☐ **359:** [Reynolds BA, Weiss S.](#)

[Related Articles](#), [Links](#)



Generation of neurons and astrocytes from isolated cells of the adult mammalian central nervous system.

Science. 1992 Mar 27;255(5052):1707-10.

PMID: 1553558 [PubMed - indexed for MEDLINE]

☐ **360:** [Renfranz PJ, Cunningham MG, McKay RD.](#)

[Related Articles](#), [Links](#)



Region-specific differentiation of the hippocampal stem cell line HiB5 upon implantation into the developing mammalian brain.

Cell. 1991 Aug 23;66(4):713-29.

PMID: 1878969 [PubMed - indexed for MEDLINE]

☐ **361:** [Valtz NL, Hayes TE, Norregaard T, Liu SM, McKay RD.](#)

[Related Articles](#), [Links](#)



An embryonic origin for medulloblastoma.

New Biol. 1991 Apr;3(4):364-71.

PMID: 2065021 [PubMed - indexed for MEDLINE]

☐ **362:** [Cattaneo E, McKay R.](#)

[Related Articles](#), [Links](#)



Proliferation and differentiation of neuronal stem cells regulated by nerve growth factor.

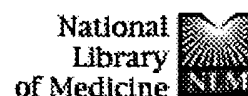
Nature. 1990 Oct 25;347(6295):762-5.

PMID: 2172829 [PubMed - indexed for MEDLINE]

Display **Summary** Show: **500** Sort **Text**
Items 1-362 of 362 One page.

[Write to the Help Desk](#)
[NCBI](#) | [NLM](#) | [NIH](#)
[Department of Health & Human Services](#)
[Freedom of Information Act](#) | [Disclaimer](#)

Mar 2 2004 16:02:50



Entrez PubMed Nucleotide Protein Genome Structure OMIM PMC Journals Books

Search PubMed for GFAP AND neuron AND nestin Go Clear

Limits Preview/Index History Clipboard Details

About Entrez

Display Summary Show: 500 Sort Send to Text

Text Version

Items 1-116 of 116

One page.

Entrez PubMed

Overview
Help | FAQ
Tutorial
New/Noteworthy
E-Utilities

PubMed Services

Journals Database
MeSH Database
Single Citation Matcher
Batch Citation Matcher
Clinical Queries
LinkOut
Cubby

Related Resources

Order Documents
NLM Gateway
TOXNET
Consumer Health
Clinical Alerts
ClinicalTrials.gov
PubMed Central

Privacy Policy

☐ 1: Dong XX, Liu JB, Dong YX.

Related Articles, Links



[Experimental study on effect of gastrodia in inducing the differentiation of mesenchymal stem cells into neuron-like cells]

Zhongguo Zhong Xi Yi Jie He Za Zhi. 2004 Jan;24(1):51-4. Chinese.

PMID: 14976891 [PubMed - in process]

☐ 2: Wang YH, Liu YJ, Lu HL, Liu ZH, Jiang XD, Xu RX, Zhou ZJ, Zou YX, Chen YZ.

Related Articles, Links



In vitro culture and induced differentiation of adult rat neural stem cells from the corpus striatum.

Di Yi Jun Yi Da Xue Xue Bao. 2004 Feb;24(2):192-4.

PMID: 14965825 [PubMed - in process]

☐ 3: Jang YK, Park JJ, Lee MC, Yoon BH, Yang YS, Yang SE, Kim SU.

Related Articles, Links



Retinoic acid-mediated induction of neurons and glial cells from human umbilical cord-derived hematopoietic stem cells.

J Neurosci Res. 2004 Feb 15;75(4):573-84.

PMID: 14743441 [PubMed - in process]

☐ 4: Zhang H, Wang JZ, Sun HY, Zhang JN, Yang SY.

Related Articles, Links



The effects of GM1 and bFGF synergistically inducing adult rat bone marrow stromal cells to form neural progenitor cells and their differentiation.

Chin J Traumatol. 2004 Feb;7(1):3-6.

PMID: 14728810 [PubMed - in process]

☐ 5: Shi Y, Chichung Lie D, Taupin P, Nakashima K, Ray J, Yu RT, Gage FH, Evans RM.

Related Articles, Links



Expression and function of orphan nuclear receptor TLX in adult neural stem cells.

Nature. 2004 Jan 1;427(6969):78-83.

PMID: 14702088 [PubMed - indexed for MEDLINE]

☐ 6: Calza L, Fernandez M, Giuliani A, Pirondi S, D'Intino G, Manservigi M, De Sordi N, Giardino L.

Related Articles, Links



Stem cells and nervous tissue repair: from in vitro to in vivo.

Prog Brain Res. 2004;146:75-91.

PMID: 14699957 [PubMed - indexed for MEDLINE]

☐ 7: Schumm MA, Castellanos DA, Frydel BR, Sagen J.

Related Articles, Links



Improved neural progenitor cell survival when cogenerated with chromaffin cells in the rat striatum.



















Exp Neurol. 2004 Jan;185(1):133-42.




















PMID: 14697324 [PubMed - indexed for MEDLINE]

☐ 8: Scemes E, Duval N, Meda P.

Related Articles, Links

Reduced expression of P2Y1 receptors in connexin43-null mice alters


-  **calcium signaling and migration of neural progenitor cells.**
J Neurosci. 2003 Dec 10;23(36):11444-52. Erratum in: J Neurosci. 2004 Jan 7;24(1):302.
PMID: 14673009 [PubMed - indexed for MEDLINE]
-  **9: Schwartz PH, Bryant PJ, Fuja TJ, Su H, O'Dowd DK, Klassen H.** [Related Articles, Links](#)
-  **Isolation and characterization of neural progenitor cells from post-mortem human cortex.**
J Neurosci Res. 2003 Dec 15;74(6):838-51.
PMID: 14648588 [PubMed - indexed for MEDLINE]
-  **10: Enzmann V, Howard RM, Yamauchi Y, Whittemore SR, Kaplan HJ.** [Related Articles, Links](#)
-  **Enhanced induction of RPE lineage markers in pluripotent neural stem cells engrafted into the adult rat subretinal space.**
Invest Ophthalmol Vis Sci. 2003 Dec;44(12):5417-22.
PMID: 14638746 [PubMed - indexed for MEDLINE]
-  **11: Ratajczak MZ, Kucia M, Reza R, Majka M, Janowska-Wieczorek A, Ratajczak J.** [Related Articles, Links](#)
-  **Stem cell plasticity revisited: CXCR4-positive cells expressing mRNA for early muscle, liver and neural cells 'hide out' in the bone marrow.**
Leukemia. 2004 Jan;18(1):29-40.
PMID: 14586476 [PubMed - indexed for MEDLINE]
-  **12: Fukuda S, Kato F, Tozuka Y, Yamaguchi M, Miyamoto Y, Hisatsune T.** [Related Articles, Links](#)
-  **Two distinct subpopulations of nestin-positive cells in adult mouse dentate gyrus.**
J Neurosci. 2003 Oct 15;23(28):9357-66. Erratum in: J Neurosci. 2004 Jan 7;24(1):24.
PMID: 14561863 [PubMed - indexed for MEDLINE]
-  **13: Kang SK, Jun ES, Bae YC, Jung JS.** [Related Articles, Links](#)
-  **Interactions between human adipose stromal cells and mouse neural stem cells in vitro.**
Brain Res Dev Brain Res. 2003 Oct 10;145(1):141-9.
PMID: 14519500 [PubMed - indexed for MEDLINE]
-  **14: Bai Y, Lin C, Hu Q, Li X, Lu A, Wang S, Li L, Shen L.** [Related Articles, Links](#)
-  **[The induction of neuronal differentiation in the glial fibrillary acid protein positive human neural progenitor cell line]**
Beijing Da Xue Xue Bao. 2003 Jun 18;35(3):266-70. Chinese.
PMID: 12914242 [PubMed - indexed for MEDLINE]
-  **15: Bennett MR, Rizvi TA, Karyala S, McKinnon RD, Ratner N.** [Related Articles, Links](#)
-  **Aberrant growth and differentiation of oligodendrocyte progenitors in neurofibromatosis type 1 mutants.**
J Neurosci. 2003 Aug 6;23(18):7207-17.
PMID: 12904481 [PubMed - indexed for MEDLINE]
-  **16: Garbuzova-Davis S, Willing AE, Zigova T, Saporta S, Justen EB, Lane JC, Hudson JE, Chen N, Davis CD, Sanberg PR.** [Related Articles, Links](#)
-  **Intravenous administration of human umbilical cord blood cells in a mouse model of amyotrophic lateral sclerosis: distribution, migration, and differentiation.**
J Hematother Stem Cell Res. 2003 Jun;12(3):255-70.
PMID: 12857367 [PubMed - indexed for MEDLINE]
-  **17: Tonchev AB, Yamashita T, Zhao L, Okano HJ, Okano H.** [Related Articles, Links](#)
- Proliferation of neural and neuronal progenitors after global brain ischemia**

-  in young adult macaque monkeys.
Mol Cell Neurosci. 2003 Jun;23(2):292-301.
PMID: 12812760 [PubMed - indexed for MEDLINE]
-  **18:** Murakami T, Fujimoto Y, Yasunaga Y, Ishida O, Tanaka N, Ikuta Y, Ochi M. [Related Articles, Links](#)
Y, Ochi M.
-  Transplanted neuronal progenitor cells in a peripheral nerve gap promote nerve repair.
Brain Res. 2003 Jun 6;974(1-2):17-24.
PMID: 12742620 [PubMed - indexed for MEDLINE]
-  **19:** Tonchev AB, Yamashima T, Zhao L, Okano H. [Related Articles, Links](#)
-  Differential proliferative response in the postischemic hippocampus, temporal cortex, and olfactory bulb of young adult macaque monkeys.
Glia. 2003 May;42(3):209-24.
PMID: 12673828 [PubMed - indexed for MEDLINE]
-  **20:** Duggal N, Iskander S, Hammond RR. [Related Articles, Links](#)
-  MAP2 and nestin co-expression in dysembryoplastic neuroepithelial tumors.
Clin Neuropathol. 2003 Mar-Apr;22(2):57-65.
PMID: 12670051 [PubMed - indexed for MEDLINE]
-  **21:** Hao HN, Zhao J, Thomas RL, Parker GC, Lyman WD. [Related Articles, Links](#)
-  Fetal human hematopoietic stem cells can differentiate sequentially into neural stem cells and then astrocytes in vitro.
J Hematother Stem Cell Res. 2003 Feb;12(1):23-32.
PMID: 12662433 [PubMed - indexed for MEDLINE]
-  **22:** Shibuya S, Miyamoto O, Itano T, Mori S, Norimatsu H. [Related Articles, Links](#)
-  Temporal progressive antigen expression in radial glia after contusive spinal cord injury in adult rats.
Glia. 2003 Apr 15;42(2):172-83.
PMID: 12655601 [PubMed - indexed for MEDLINE]
-  **23:** Iori FP, Galderisi U, Piegari E, Cipollaro M, Cascino A, Peluso G, Cotrufo R, Giordano A, Melone MA. [Related Articles, Links](#)
-  EGF-responsive rat neural stem cells: molecular follow-up of neuron and astrocyte differentiation in vitro.
J Cell Physiol. 2003 May;195(2):220-33.
PMID: 12652649 [PubMed - indexed for MEDLINE]
-  **24:** Lou S, Gu P, Chen F, He C, Wang M, Lu C. [Related Articles, Links](#)
-  The effect of bone marrow stromal cells on neuronal differentiation of mesencephalic neural stem cells in Sprague-Dawley rats.
Brain Res. 2003 Apr 4;968(1):114-21.
PMID: 12644269 [PubMed - indexed for MEDLINE]
-  **25:** Ajo R, Cacicedo L, Navarro C, Sanchez-Franco F. [Related Articles, Links](#)
-  Growth hormone action on proliferation and differentiation of cerebral cortical cells from fetal rat.
Endocrinology. 2003 Mar;144(3):1086-97.
PMID: 12586785 [PubMed - indexed for MEDLINE]
-  **26:** Vicario-Abejon C, Yusta-Boyo MJ, Fernandez-Moreno C, de Pablo F. [Related Articles, Links](#)
-  Locally born olfactory bulb stem cells proliferate in response to insulin-related factors and require endogenous insulin-like growth factor-I for

differentiation into neurons and glia.

J Neurosci. 2003 Feb 1;23(3):895-906.

PMID: 12574418 [PubMed - indexed for MEDLINE]

-  **27:** [Kim G, Choe Y, Park J, Cho S, Kim K.](#)


[Related Articles, Links](#)



Activation of protein kinase A induces neuronal differentiation of HiB5 hippocampal progenitor cells.

Brain Res Mol Brain Res. 2002 Dec 30;109(1-2):134-45.

PMID: 12531523 [PubMed - indexed for MEDLINE]

-  **28:** [Hsieh WY, Hsieh YL, Liu DD, Yang SN, Wu JN.](#)


[Related Articles, Links](#)



Neural progenitor cells resist excitatory amino acid-induced neurotoxicity.

J Neurosci Res. 2003 Jan 15;71(2):272-8.

PMID: 12503090 [PubMed - indexed for MEDLINE]

-  **29:** [Amano T, Inamura T, Wu CM, Kura S, Nakamizo A, Inoha S, Miyazono M, Ikezaki K.](#)


[Related Articles, Links](#)



Effects of single low dose irradiation on subventricular zone cells in juvenile rat brain.

Neurol Res. 2002 Dec;24(8):809-16.

PMID: 12500705 [PubMed - indexed for MEDLINE]

-  **30:** [Charytoniuk D, Traiffort E, Hantraye P, Hermel JM, Galdes A, Ruat M.](#)


[Related Articles, Links](#)



Intrastriatal sonic hedgehog injection increases Patched transcript levels in the adult rat subventricular zone.

Eur J Neurosci. 2002 Dec;16(12):2351-7.

PMID: 12492430 [PubMed - indexed for MEDLINE]

-  **31:** [Cai J, Wu Y, Mirua T, Pierce JL, Lucero MT, Albertine KH, Spangrude GJ, Rao MS.](#)


[Related Articles, Links](#)



Properties of a fetal multipotent neural stem cell (NEP cell).

Dev Biol. 2002 Nov 15;251(2):221-40.

PMID: 12435354 [PubMed - indexed for MEDLINE]

-  **32:** [Akita J, Takahashi M, Hojo M, Nishida A, Haruta M, Honda Y.](#)

[Related Articles, Links](#)



Neuronal differentiation of adult rat hippocampus-derived neural stem cells transplanted into embryonic rat explanted retinas with retinoic acid pretreatment.

Brain Res. 2002 Nov 8;954(2):286-93.

PMID: 12414111 [PubMed - indexed for MEDLINE]

-  **33:** [Wei LC, Shi M, Chen LW, Cao R, Zhang P, Chan YS.](#)


[Related Articles, Links](#)



Nestin-containing cells express glial fibrillary acidic protein in the proliferative regions of central nervous system of postnatal developing and adult mice.

Brain Res Dev Brain Res. 2002 Nov 15;139(1):9-17.

PMID: 12414089 [PubMed - indexed for MEDLINE]

-  **34:** [Shibuya S, Miyamoto O, Auer RN, Itano T, Mori S, Norimatsu H.](#)


[Related Articles, Links](#)



Embryonic intermediate filament, nestin, expression following traumatic spinal cord injury in adult rats.

Neuroscience. 2002;114(4):905-16.

PMID: 12379246 [PubMed - indexed for MEDLINE]

-  **35:** [Milosevic A, Goldman JE.](#)


[Related Articles, Links](#)




Progenitors in the postnatal cerebellar white matter are antigenically heterogeneous.

J Comp Neurol. 2002 Oct 14;452(2):192-203.

PMID: 12271492 [PubMed - indexed for MEDLINE]


-  **36:** [Kamitori K, Machide M, Tomita K, Nakafuku M, Kohsaka S.](#) [Related Articles, Links](#)

 **Cell-type-specific expression of protein tyrosine kinase-related receptor RYK in the central nervous system of the rat.**

Brain Res Mol Brain Res. 2002 Aug 15;104(2):255-66.


PMID: 12225882 [PubMed - indexed for MEDLINE]

-  **37:** [Schumm MA, Castellanos DA, Frydel BR, Sagen J.](#) [Related Articles, Links](#)

 **Enhanced viability and neuronal differentiation of neural progenitors by chromaffin cell co-culture.**

Brain Res Dev Brain Res. 2002 Aug 30;137(2):115-25.


PMID: 12220703 [PubMed - indexed for MEDLINE]


-  **38:** [Romero-Ramos M, Vourc'h P, Young HE, Lucas PA, Wu Y, Chivatakarn O, Zaman R, Dunkelman N, el-Kalay MA, Chesselet MF.](#) [Related Articles, Links](#)

 **Neuronal differentiation of stem cells isolated from adult muscle.**

J Neurosci Res. 2002 Sep 15;69(6):894-907.


PMID: 12205682 [PubMed - indexed for MEDLINE]


-  **39:** [Espinosa-Jeffrey A, Becker-Catania SG, Zhao PM, Cole R, Edmond J, de Vellis J.](#) [Related Articles, Links](#)

 **Selective specification of CNS stem cells into oligodendroglial or neuronal cell lineage: cell culture and transplant studies.**

J Neurosci Res. 2002 Sep 15;69(6):810-25.

PMID: 12205675 [PubMed - indexed for MEDLINE]


-  **40:** [Ignatova TN, Kukekov VG, Laywell ED, Suslov ON, Vrionis FD, Steindler DA.](#) [Related Articles, Links](#)

 **Human cortical glial tumors contain neural stem-like cells expressing astroglial and neuronal markers in vitro.**

Glia. 2002 Sep;39(3):193-206.


PMID: 12203386 [PubMed - indexed for MEDLINE]


-  **41:** [Mizuguchi M, Yamanouchi H, Becker LE, Itoh M, Takashima S.](#) [Related Articles, Links](#)

 **Doublecortin immunoreactivity in giant cells of tuberous sclerosis and focal cortical dysplasia.**

Acta Neuropathol (Berl). 2002 Oct;104(4):418-24. Epub 2002 Jun 25.


PMID: 12200630 [PubMed - indexed for MEDLINE]


-  **42:** [Kuroda T, Nakamura H, Itoh K, Le WR, Yoshimura S, Takenaka K, Sakai N.](#) [Related Articles, Links](#)

 **Nestin immunoreactivity in local neurons of the adult rat striatum after remote cortical injury.**

J Chem Neuroanat. 2002 Jul;24(2):137-46.


PMID: 12191730 [PubMed - indexed for MEDLINE]


-  **43:** [Khelfaoui M, Guimiot F, Simonneau M.](#) [Related Articles, Links](#)

 **Early neuronal and glial determination from mouse E10.5 telencephalon embryonic stem cells: an in vitro study.**

Neuroreport. 2002 Jul 2;13(9):1209-14.



















PMID: 12151771 [PubMed - indexed for MEDLINE]





















-  **44:** [Zhang X, Li X, Wu J, Wang Z, Xu H, Yang D.](#) [Related Articles, Links](#)

 **[Isolation, cultivation and identification of stem cells from cerebral cortex of mouse embryo]**

Zhonghua Yi Xue Za Zhi. 2002 Jun 25;82(12):832-5. Chinese.


PMID: 12126533 [PubMed - indexed for MEDLINE]

-  **45:** [Gu H, Wang S, Messam CA, Yao Z.](#) [Related Articles, Links](#)
 **Distribution of nestin immunoreactivity in the normal adult human forebrain.**
Brain Res. 2002 Jul 12;943(2):174-80.
PMID: 12101039 [PubMed - indexed for MEDLINE]
-  **46:** [Safford KM, Hicok KC, Safford SD, Halvorsen YD, Wilkison WO, Gimble JM, Rice HE.](#) [Related Articles, Links](#)
 **Neurogenic differentiation of murine and human adipose-derived stromal cells.**
Biochem Biophys Res Commun. 2002 Jun 7;294(2):371-9.
PMID: 12051722 [PubMed - indexed for MEDLINE]
-  **47:** [Schmidt-Kastner R, Humpel C.](#) [Related Articles, Links](#)
 **Nestin expression persists in astrocytes of organotypic slice cultures from rat cortex.**
Int J Dev Neurosci. 2002 Feb;20(1):29-38.
PMID: 12008072 [PubMed - indexed for MEDLINE]
-  **48:** [Poltavtseva RA, Marey MV, Aleksandrova MA, Revishchin AV, Korochkin LI, Sukhikh GT.](#) [Related Articles, Links](#)
 **Evaluation of progenitor cell cultures from human embryos for neurotransplantation.**
Brain Res Dev Brain Res. 2002 Mar 31;134(1-2):149-54.
PMID: 11947945 [PubMed - indexed for MEDLINE]
-  **49:** [Englund U, Bjorklund A, Wictorin K.](#) [Related Articles, Links](#)
 **Migration patterns and phenotypic differentiation of long-term expanded human neural progenitor cells after transplantation into the adult rat brain.**
Brain Res Dev Brain Res. 2002 Mar 31;134(1-2):123-41.
PMID: 11947943 [PubMed - indexed for MEDLINE]
-  **50:** [Messam CA, Hou J, Berman JW, Major EO.](#) [Related Articles, Links](#)
 **Analysis of the temporal expression of nestin in human fetal brain derived neuronal and glial progenitor cells.**
Brain Res Dev Brain Res. 2002 Mar 31;134(1-2):87-92.
PMID: 11947939 [PubMed - indexed for MEDLINE]
-  **51:** [Krum JM, Phillips TM, Rosenstein JM.](#) [Related Articles, Links](#)
 **Changes in astroglial GLT-1 expression after neural transplantation or stab wounds.**
Exp Neurol. 2002 Apr;174(2):137-49.
PMID: 11922656 [PubMed - indexed for MEDLINE]
-  **52:** [Kojima A, Tator CH.](#) [Related Articles, Links](#)
 **Intrathecal administration of epidermal growth factor and fibroblast growth factor 2 promotes ependymal proliferation and functional recovery after spinal cord injury in adult rats.**
J Neurotrauma. 2002 Feb;19(2):223-38.
PMID: 11893024 [PubMed - indexed for MEDLINE]
-  **53:** [Kotani M, Osanai T, Tajima Y, Kato H, Imada M, Kaneda H, Kubo H, Sakuraba H.](#) [Related Articles, Links](#)
 **Identification of neuronal cell lineage-specific molecules in the neuronal differentiation of P19 EC cells and mouse central nervous system.**
J Neurosci Res. 2002 Mar 1;67(5):595-606.
PMID: 11891772 [PubMed - indexed for MEDLINE]
- [Lemkine GF, Mantero S, Migne C, Raji A, Goula D, Normandie P.](#)


-  **54:** [Levi G, Demencix BA.](#) [Related Articles, Links](#)
 **Preferential transfection of adult mouse neural stem cells and their immediate progeny in vivo with polyethylenimine.**
Mol Cell Neurosci. 2002 Feb;19(2):165-74.
PMID: 11860270 [PubMed - indexed for MEDLINE]
-  **55:** [Wen PH, Friedrich VL Jr, Shioi J, Robakis NK, Elder GA.](#) [Related Articles, Links](#)
 **Presenilin-1 is expressed in neural progenitor cells in the hippocampus of adult mice.**
Neurosci Lett. 2002 Jan 25;318(2):53-6.
PMID: 11796184 [PubMed - indexed for MEDLINE]
-  **56:** [Hughes SM, Moussavi-Harami F, Sauter SL, Davidson BL.](#) [Related Articles, Links](#)
 **Viral-mediated gene transfer to mouse primary neural progenitor cells.**
Mol Ther. 2002 Jan;5(1):16-24.
PMID: 11786041 [PubMed - indexed for MEDLINE]
-  **57:** [Tzeng SF, Bresnahan JC, Beattie MS, de Vellis J.](#) [Related Articles, Links](#)
 **Upregulation of the HLH Id gene family in neural progenitors and glial cells of the rat spinal cord following contusion injury.**
J Neurosci Res. 2001 Dec 15;66(6):1161-72.
PMID: 11746449 [PubMed - indexed for MEDLINE]
-  **58:** [Piper DR, Mujtaba T, Keyoung H, Roy NS, Goldman SA, Rao MS, Lucero MT.](#) [Related Articles, Links](#)
 **Identification and characterization of neuronal precursors and their progeny from human fetal tissue.**
J Neurosci Res. 2001 Nov 1;66(3):356-68.
PMID: 11746353 [PubMed - indexed for MEDLINE]
-  **59:** [Kernie SG, Erwin TM, Parada LF.](#) [Related Articles, Links](#)
 **Brain remodeling due to neuronal and astrocytic proliferation after controlled cortical injury in mice.**
J Neurosci Res. 2001 Nov 1;66(3):317-26.
PMID: 11746349 [PubMed - indexed for MEDLINE]
-  **60:** [Revishchin AV, Poltavtseva RA, Marei MV, Aleksandrova MA, Viktorov IV, Korochkin LI, Sukhikh GT.](#) [Related Articles, Links](#)
 **Structure of cell clusters formed in cultures of dissociated human embryonic brain.**
Bull Exp Biol Med. 2001 Sep;132(3):856-60.
PMID: 11740577 [PubMed - indexed for MEDLINE]
-  **61:** [Duggal N, Iskander S, Hammond RR.](#) [Related Articles, Links](#)
 **Nestin expression in cortical dysplasia.**
J Neurosurg. 2001 Sep;95(3):459-65.
PMID: 11565868 [PubMed - indexed for MEDLINE]
-  **62:** [Taylor JP, Sater R, French J, Baltuch G, Crino PB.](#) [Related Articles, Links](#)
 **Transcription of intermediate filament genes is enhanced in focal cortical dysplasia.**
Acta Neuropathol (Berl). 2001 Aug;102(2):141-8.
PMID: 11563628 [PubMed - indexed for MEDLINE]
-  **63:** [Menet V, Gimenez y Ribotta M, Chauvet N, Drian MJ, Lannoy J, Colucci-Guyon E, Privat A.](#) [Related Articles, Links](#)
 **Inactivation of the glial fibrillary acidic protein gene, but not that of vimentin, improves neuronal survival and neurite growth by modifying**

adhesion molecule expression.
J Neurosci. 2001 Aug 15;21(16):6147-58.
PMID: 11487638 [PubMed - indexed for MEDLINE]


-  **64:** [Andrae J, Hansson I, Afink GB, Nister M.](#) [Related Articles, Links](#)


 Platelet-derived growth factor receptor-alpha in ventricular zone cells and in developing neurons.
Mol Cell Neurosci. 2001 Jun;17(6):1001-13.
PMID: 11414789 [PubMed - indexed for MEDLINE]


-  **65:** [Vitry S, Avellana-Adalid V, Lachapelle F, Evercooren AB.](#) [Related Articles, Links](#)


 Migration and multipotentiality of PSA-NCAM+ neural precursors transplanted in the developing brain.
Mol Cell Neurosci. 2001 Jun;17(6):983-1000.
PMID: 11414788 [PubMed - indexed for MEDLINE]


-  **66:** [Duittoz AH, Hevor T.](#) [Related Articles, Links](#)

 Primary culture of neural precursors from the ovine central nervous system (CNS).
J Neurosci Methods. 2001 May 30;107(1-2):131-40.
PMID: 11389950 [PubMed - indexed for MEDLINE]


-  **67:** [Skogh C, Eriksson C, Kokaia M, Meijer XC, Wahlberg LU, Victorin K, Campbell K.](#) [Related Articles, Links](#)


 Generation of regionally specified neurons in expanded glial cultures derived from the mouse and human lateral ganglionic eminence.
Mol Cell Neurosci. 2001 May;17(5):811-20.
PMID: 11358480 [PubMed - indexed for MEDLINE]


-  **68:** [Nishida A, Takahashi M, Tanihara H, Nakano I, Takahashi JB, Mizoguchi A, Ide C, Honda Y.](#) [Related Articles, Links](#)

 Incorporation and differentiation of hippocampus-derived neural stem cells transplanted in injured adult rat retina.
Invest Ophthalmol Vis Sci. 2000 Dec;41(13):4268-74.
PMID: 11095625 [PubMed - indexed for MEDLINE]


-  **69:** [Ajtai BM, Kalman M.](#) [Related Articles, Links](#)

 Axon growth failure following corpus callosum lesions precedes glial reaction in perinatal rats.
Anat Embryol (Berl). 2000 Oct;202(4):313-21.
PMID: 11000282 [PubMed - indexed for MEDLINE]


-  **70:** [Behar TN, Schaffner AE, Scott CA, Greene CL, Barker JL.](#) [Related Articles, Links](#)

 GABA receptor antagonists modulate postmitotic cell migration in slice cultures of embryonic rat cortex.
Cereb Cortex. 2000 Sep;10(9):899-909.
PMID: 10982750 [PubMed - indexed for MEDLINE]


-  **71:** [Menet V, Gimenez Y, Ribotta M, Sandillon F, Privat A.](#) [Related Articles, Links](#)


 GFAP null astrocytes are a favorable substrate for neuronal survival and neurite growth.
Glia. 2000 Sep;31(3):267-72.
PMID: 10941153 [PubMed - indexed for MEDLINE]

-  **72:** [Jacobs JS, Miller MW.](#) [Related Articles, Links](#)


 Cell cycle kinetics and immunohistochemical characterization of dissociated fetal neocortical cultures: evidence that differentiated neurons have mitotic capacity.

Brain Res Dev Brain Res. 2000 Jul 30;122(1):67-80.
PMID: 10915906 [PubMed - indexed for MEDLINE]


-  **73:** [Sanchez-Ramos J, Song S, Cardozo-Pelaez F, Hazzi C, Stedeford T, Willing A, Freeman TB, Saporta S, Janssen W, Patel N, Cooper DR, Sanberg PR.](#) [Related Articles, Links](#)


 **Adult bone marrow stromal cells differentiate into neural cells in vitro.**
Exp Neurol. 2000 Aug;164(2):247-56.
PMID: 10915564 [PubMed - indexed for MEDLINE]


-  **74:** [Piper DR, Mujtaba T, Rao MS, Lucero MT.](#) [Related Articles, Links](#)


 **Immunocytochemical and physiological characterization of a population of cultured human neural precursors.**
J Neurophysiol. 2000 Jul;84(1):534-48.
PMID: 10899225 [PubMed - indexed for MEDLINE]


-  **75:** [Palm K, Salin-Nordstrom T, Levesque MF, Neuman T.](#) [Related Articles, Links](#)


 **Fetal and adult human CNS stem cells have similar molecular characteristics and developmental potential.**
Brain Res Mol Brain Res. 2000 May 31;78(1-2):192-5.
PMID: 10891600 [PubMed - indexed for MEDLINE]


-  **76:** [Rubio FJ, Bueno C, Villa A, Navarro B, Martinez-Serrano A.](#) [Related Articles, Links](#)

 **Genetically perpetuated human neural stem cells engraft and differentiate into the adult mammalian brain.**
Mol Cell Neurosci. 2000 Jul;16(1):1-13.
PMID: 10882478 [PubMed - indexed for MEDLINE]


-  **77:** [Kanno H, Saljooque F, Yamamoto I, Hattori S, Yao M, Shuin T, U HS.](#) [Related Articles, Links](#)


 **Role of the von Hippel-Lindau tumor suppressor protein during neuronal differentiation.**
Cancer Res. 2000 Jun 1;60(11):2820-4.
PMID: 10850421 [PubMed - indexed for MEDLINE]


-  **78:** [Bernier PJ, Vinet J, Cossette M, Parent A.](#) [Related Articles, Links](#)


 **Characterization of the subventricular zone of the adult human brain: evidence for the involvement of Bcl-2.**
Neurosci Res. 2000 May;37(1):67-78.
PMID: 10802345 [PubMed - indexed for MEDLINE]


-  **79:** [Messam CA, Hou J, Major EO.](#) [Related Articles, Links](#)




















 **Coexpression of nestin in neural and glial cells in the developing human CNS defined by a human-specific anti-nestin antibody.**
Exp Neurol. 2000 Feb;161(2):585-96.
PMID: 10686078 [PubMed - indexed for MEDLINE]





















-  **80:** [Villa A, Snyder EY, Vescovi A, Martinez-Serrano A.](#) [Related Articles, Links](#)




















 **Establishment and properties of a growth factor-dependent, perpetual neural stem cell line from the human CNS.**
Exp Neurol. 2000 Jan;161(1):67-84.
PMID: 10683274 [PubMed - indexed for MEDLINE]

-  **81:** [Kaneko Y, Sakakibara S, Imai T, Suzuki A, Nakamura Y, Sawamoto K, Ogawa Y, Toyama Y, Miyata T, Okano H.](#) [Related Articles, Links](#)


 **Musashi1: an evolutionally conserved marker for CNS progenitor cells including neural stem cells.**
Dev Neurosci. 2000;22(1-2):139-53.
PMID: 10657706 [PubMed - indexed for MEDLINE]

-  **82:** [Zhu G, Mehler MF, Zhao J, Yu Yung S, Kessler JA.](#) [Related Articles, Links](#)
 **Sonic hedgehog and BMP2 exert opposing actions on proliferation and differentiation of embryonic neural progenitor cells.**
Dev Biol. 1999 Nov 1;215(1):118-29.
PMID: 10525354 [PubMed - indexed for MEDLINE]
-  **83:** [Quinn SM, Walters WM, Vescovi AL, Whittemore SR.](#) [Related Articles, Links](#)
 **Lineage restriction of neuroepithelial precursor cells from fetal human spinal cord.**
J Neurosci Res. 1999 Sep 1;57(5):590-602.
PMID: 10462684 [PubMed - indexed for MEDLINE]
-  **84:** [Kukekov VG, Laywell ED, Suslov O, Davies K, Scheffler B, Thomas LB, O'Brien TF, Kusakabe M, Steindler DA.](#) [Related Articles, Links](#)
 **Multipotent stem/progenitor cells with similar properties arise from two neurogenic regions of adult human brain.**
Exp Neurol. 1999 Apr;156(2):333-44.
PMID: 10328940 [PubMed - indexed for MEDLINE]
-  **85:** [Domercq M, Matute C.](#) [Related Articles, Links](#)
 **Expression of glutamate transporters in the adult bovine corpus callosum.**
Brain Res Mol Brain Res. 1999 Apr 20;67(2):296-302.
PMID: 10216228 [PubMed - indexed for MEDLINE]
-  **86:** [Zhou FC, Chiang YH.](#) [Related Articles, Links](#)
 **Long-term nonpassaged EGF-responsive neural precursor cells are stem cells.**
Wound Repair Regen. 1998 Jul-Aug;6(4):337-48.
PMID: 9824552 [PubMed - indexed for MEDLINE]
-  **87:** [Ali SA, Pappas IS, Parnavelas JG.](#) [Related Articles, Links](#)
 **Collagen type IV promotes the differentiation of neuronal progenitors and inhibits astroglial differentiation in cortical cell cultures.**
Brain Res Dev Brain Res. 1998 Sep 10;110(1):31-8.
PMID: 9733911 [PubMed - indexed for MEDLINE]
-  **88:** [Winkler C, Fricker RA, Gates MA, Olsson M, Hammang JP, Carpenter MK, Bjorklund A.](#) [Related Articles, Links](#)
 **Incorporation and glial differentiation of mouse EGF-responsive neural progenitor cells after transplantation into the embryonic rat brain.**
Mol Cell Neurosci. 1998 Jun;11(3):99-116.
PMID: 9647689 [PubMed - indexed for MEDLINE]
-  **89:** [Scherer SE, Gallo V.](#) [Related Articles, Links](#)
 **Expression and regulation of kainate and AMPA receptors in the rat neural tube.**
J Neurosci Res. 1998 May 1;52(3):356-68.
PMID: 9590444 [PubMed - indexed for MEDLINE]
-  **90:** [Pekny M, Eliasson C, Chien CL, Kindblom LG, Liem R, Hamberger A, Betsholtz C.](#) [Related Articles, Links](#)
 **GFAP-deficient astrocytes are capable of stellation in vitro when cocultured with neurons and exhibit a reduced amount of intermediate filaments and an increased cell saturation density.**
Exp Cell Res. 1998 Mar 15;239(2):332-43.
PMID: 9521851 [PubMed - indexed for MEDLINE]
-  **91:** [Murray K, Dubois-Dalcq M.](#) [Related Articles, Links](#)

-  **Emergence of oligodendrocytes from human neural spheres.**
J Neurosci Res. 1997 Oct 15;50(2):146-56.
PMID: 9373025 [PubMed - indexed for MEDLINE]
-  **92:** Fanarraga ML, Milward EA. [Related Articles, Links](#)
-  **Characterization of a putative novel type of oligodendrocyte in cultures from rat spinal cord.**
Eur J Neurosci. 1997 Oct;9(10):2213-7.
PMID: 9421182 [PubMed - indexed for MEDLINE]
-  **93:** Kukekov VG, Laywell ED, Thomas LB, Steindler DA. [Related Articles, Links](#)
-  **A nestin-negative precursor cell from the adult mouse brain gives rise to neurons and glia.**
Glia. 1997 Dec;21(4):399-407.
PMID: 9419015 [PubMed - indexed for MEDLINE]
-  **94:** Meltzer H, Hatton JD, Sang U H. [Related Articles, Links](#)
-  **Cell type-specific development of rodent central nervous system progenitor cells in culture.**
J Neurosurg. 1998 Jan;88(1):93-8.
PMID: 9420078 [PubMed - indexed for MEDLINE]
-  **95:** Hulsbos R, Tiarks C, Reilly J, Hsieh CC, Recht L, Quesenberry PJ. [Related Articles, Links](#)
-  **In vitro cell density-dependent clonal growth of EGF-responsive murine neural progenitor cells under serum-free conditions.**
Exp Neurol. 1997 Nov;148(1):147-56.
PMID: 9398457 [PubMed - indexed for MEDLINE]
-  **96:** Lavdas AA, Blue ME, Lincoln J, Parnavelas JG. [Related Articles, Links](#)
-  **Serotonin promotes the differentiation of glutamate neurons in organotypic slice cultures of the developing cerebral cortex.**
J Neurosci. 1997 Oct 15;17(20):7872-80.
PMID: 9315907 [PubMed - indexed for MEDLINE]
-  **97:** Yamanouchi H, Jay V, Rutka JT, Takashima S, Becker LE. [Related Articles, Links](#)
-  **Evidence of abnormal differentiation in giant cells of tuberous sclerosis.**
Pediatr Neurol. 1997 Jul;17(1):49-53.
PMID: 9308976 [PubMed - indexed for MEDLINE]
-  **98:** Maleski M, Hockfield S. [Related Articles, Links](#)
-  **Glial cells assemble hyaluronan-based pericellular matrices in vitro.**
Glia. 1997 Jul;20(3):193-202.
PMID: 9215728 [PubMed - indexed for MEDLINE]
-  **99:** Kalyani A, Hobson K, Rao MS. [Related Articles, Links](#)
-  **Neuroepithelial stem cells from the embryonic spinal cord: isolation, characterization, and clonal analysis.**
Dev Biol. 1997 Jun 15;186(2):202-23.
PMID: 9205140 [PubMed - indexed for MEDLINE]
-  **100:** Lundberg C, Martinez-Serrano A, Cattaneo E, McKay RD, Bjorklund A. [Related Articles, Links](#)
-  **Survival, integration, and differentiation of neural stem cell lines after transplantation to the adult rat striatum.**
Exp Neurol. 1997 Jun;145(2 Pt 1):342-60.
PMID: 9217071 [PubMed - indexed for MEDLINE]
-  **101:** Levison SW, Goldman JE. [Related Articles, Links](#)

-  **Multipotential and lineage restricted precursors coexist in the mammalian perinatal subventricular zone.**
J Neurosci Res. 1997 Apr 15;48(2):83-94.
PMID: 9130137 [PubMed - indexed for MEDLINE]
-  **102:** Seidman KJ, Teng AL, Rosenkopf R, Spilotro P, Weyhenmeyer JA. [Related Articles, Links](#)
-  **Isolation, cloning and characterization of a putative type-1 astrocyte cell line.**
Brain Res. 1997 Apr 4;753(1):18-26.
PMID: 9125427 [PubMed - indexed for MEDLINE]
-  **103:** Rosser AE, Tyers P, ter Borg M, Dunnett SB, Svendsen CN. [Related Articles, Links](#)
-  **Co-expression of MAP-2 and GFAP in cells developing from rat EGF responsive precursor cells.**
Brain Res Dev Brain Res. 1997 Feb 20;98(2):291-5.
PMID: 9051273 [PubMed - indexed for MEDLINE]
-  **104:** Ho CL, Liem RK. [Related Articles, Links](#)
-  **Intermediate filaments in the nervous system: implications in cancer.**
Cancer Metastasis Rev. 1996 Dec;15(4):483-97. Review.
PMID: 9034605 [PubMed - indexed for MEDLINE]
-  **105:** Schinstine M, Iacovitti L. [Related Articles, Links](#)
-  **Expression of neuronal antigens by astrocytes derived from EGF-generated neuroprogenitor cells.**
Exp Neurol. 1996 Sep;141(1):67-78.
PMID: 8797669 [PubMed - indexed for MEDLINE]
-  **106:** Hasgekar N, Saranath D, Seshadri R, Krishnaveni L, Ghosh S, Lalitha VS. [Related Articles, Links](#)
-  **A neural precursor cell line derived from murine teratocarcinoma.**
Int J Dev Biol. 1996 Jun;40(3):591-7.
PMID: 8840191 [PubMed - indexed for MEDLINE]
-  **107:** Adams FS, La Rosa FG, Kumar S, Edwards-Prasad J, Kentroti S, Vernadakis A, Freed CR, Prasad KN. [Related Articles, Links](#)
-  **Characterization and transplantation of two neuronal cell lines with dopaminergic properties.**
Neurochem Res. 1996 May;21(5):619-27.
PMID: 8726972 [PubMed - indexed for MEDLINE]
-  **108:** Thomas LB, Gates MA, Steindler DA. [Related Articles, Links](#)
-  **Young neurons from the adult subependymal zone proliferate and migrate along an astrocyte, extracellular matrix-rich pathway.**
Glia. 1996 May;17(1):1-14.
PMID: 8723838 [PubMed - indexed for MEDLINE]
-  **109:** Frederiksen K, Thorpe A, Richards SJ, Waters J, Dunnett SB, Sandberg BE. [Related Articles, Links](#)
-  **Immortalized neural cells from trisomy 16 mice as models for Alzheimer's disease.**
Ann N Y Acad Sci. 1996 Jan 17;777:415-20.
PMID: 8624123 [PubMed - indexed for MEDLINE]
-  **110:** Zerlin M, Levison SW, Goldman JE. [Related Articles, Links](#)
-  **Early patterns of migration, morphogenesis, and intermediate filament expression of subventricular zone cells in the postnatal rat forebrain.**
J Neurosci. 1995 Nov;15(11):7238-49.

PMID: 7472478 [PubMed - indexed for MEDLINE]

-  **111:** [Gates MA, Thomas LB, Howard EM, Laywell ED, Sajin B, Faissner A, Gotz B, Silver J, Steindler DA.](#) [Related Articles, Links](#)



Cell and molecular analysis of the developing and adult mouse subventricular zone of the cerebral hemispheres.

J Comp Neurol. 1995 Oct 16;361(2):249-66.

PMID: 8543661 [PubMed - indexed for MEDLINE]


-  **112:** [Santa-Olalla J, Covarrubias L.](#) [Related Articles, Links](#)



Epidermal growth factor (EGF), transforming growth factor-alpha (TGF-alpha), and basic fibroblast growth factor (bFGF) differentially influence neural precursor cells of mouse embryonic mesencephalon.

J Neurosci Res. 1995 Oct 1;42(2):172-83. Erratum in: J Neurosci Res 1995 Dec 15;42(6):855.

PMID: 8568917 [PubMed - indexed for MEDLINE]

-  **113:** [Fraichard A, Chassande O, Bilbaut G, Dehay C, Savatier P, Samarut J.](#) [Related Articles, Links](#)



In vitro differentiation of embryonic stem cells into glial cells and functional neurons.

J Cell Sci. 1995 Oct;108 (Pt 10):3181-8.

PMID: 7593279 [PubMed - indexed for MEDLINE]


-  **114:** [Duprey P, Paulin D.](#) [Related Articles, Links](#)



What can be learned from intermediate filament gene regulation in the mouse embryo.

Int J Dev Biol. 1995 Jun;39(3):443-57. Review.

PMID: 7577435 [PubMed - indexed for MEDLINE]

-  **115:** [Yachnis AT, Rorke LB, Lee VM, Trojanowski JQ.](#) [Related Articles, Links](#)



Expression of neuronal and glial polypeptides during histogenesis of the human cerebellar cortex including observations on the dentate nucleus.

J Comp Neurol. 1993 Aug 15;334(3):356-69.

PMID: 7690783 [PubMed - indexed for MEDLINE]

-  **116:** [Reynolds BA, Weiss S.](#) [Related Articles, Links](#)



Generation of neurons and astrocytes from isolated cells of the adult mammalian central nervous system.

Science. 1992 Mar 27;255(5052):1707-10.

PMID: 1553558 [PubMed - indexed for MEDLINE]

Display **Summary** Show: **500** Sort **Send to** **Text**
Items 1-116 of 116 One page.

[Write to the Help Desk](#)
[NCBI](#) | [NLM](#) | [NIH](#)
[Department of Health & Human Services](#)
[Freedom of Information Act](#) | [Disclaimer](#)

Connecting via Winsock to STN
Welcome to STN International! Enter x:x
***** Welcome to STN International *****
***** STN Columbus *****

FILE 'HOME' ENTERED AT 08:55:01 ON 05 MAR 2004

=> file BIOSCIENCE

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

FILE 'ADISCTI' ENTERED AT 08:55:10 ON 05 MAR 2004

COPYRIGHT (C) 2004 Adis Data Information BV

FILE 'ADISINSIGHT' ENTERED AT 08:55:10 ON 05 MAR 2004

COPYRIGHT (C) 2004 Adis Data Information BV

FILE 'ADISNEWS' ENTERED AT 08:55:10 ON 05 MAR 2004

COPYRIGHT (C) 2004 Adis Data Information BV

FILE 'AGRICOLA' ENTERED AT 08:55:10 ON 05 MAR 2004

FILE 'ANABSTR' ENTERED AT 08:55:10 ON 05 MAR 2004

COPYRIGHT (C) 2004 THE ROYAL SOCIETY OF CHEMISTRY (RSC)

FILE 'AQUASCI' ENTERED AT 08:55:10 ON 05 MAR 2004

COPYRIGHT 2004 FAO (On behalf of the ASFA Advisory Board). All rights reserved.

FILE 'BIOBUSINESS' ENTERED AT 08:55:10 ON 05 MAR 2004

COPYRIGHT (C) 2004 Biological Abstracts, Inc. (BIOSIS)

FILE 'BIOCOMMERCE' ENTERED AT 08:55:10 ON 05 MAR 2004

COPYRIGHT (C) 2004 BioCommerce Data Ltd. Richmond Surrey, United Kingdom. All rights reserved

FILE 'BIOSIS' ENTERED AT 08:55:10 ON 05 MAR 2004

COPYRIGHT (C) 2004 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'BIOTECHABS' ACCESS NOT AUTHORIZED

FILE 'BIOTECHDS' ENTERED AT 08:55:10 ON 05 MAR 2004

COPYRIGHT (C) 2004 THOMSON DERWENT AND INSTITUTE FOR SCIENTIFIC INFORMATION

FILE 'BIOTECHNO' ENTERED AT 08:55:10 ON 05 MAR 2004

COPYRIGHT (C) 2004 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'CABA' ENTERED AT 08:55:10 ON 05 MAR 2004

COPYRIGHT (C) 2004 CAB INTERNATIONAL (CABI)

FILE 'CANCERLIT' ENTERED AT 08:55:10 ON 05 MAR 2004

FILE 'CAPLUS' ENTERED AT 08:55:10 ON 05 MAR 2004

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'CEABA-VTB' ENTERED AT 08:55:10 ON 05 MAR 2004

COPYRIGHT (c) 2004 DECHEMA eV

FILE 'CEN' ENTERED AT 08:55:10 ON 05 MAR 2004

COPYRIGHT (C) 2004 American Chemical Society (ACS)

FILE 'CIN' ENTERED AT 08:55:10 ON 05 MAR 2004

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2004 American Chemical Society (ACS)

FILE 'CONFSCI' ENTERED AT 08:55:10 ON 05 MAR 2004

COPYRIGHT (C) 2004 Cambridge Scientific Abstracts (CSA)

FILE 'CROPB' ENTERED AT 08:55:10 ON 05 MAR 2004

COPYRIGHT (C) 2004 THOMSON DERWENT

FILE 'CROPU' ENTERED AT 08:55:10 ON 05 MAR 2004

COPYRIGHT (C) 2004 THOMSON DERWENT

FILE 'DISSABS' ENTERED AT 08:55:10 ON 05 MAR 2004

COPYRIGHT (C) 2004 Proquest Information and Learning Company. All Rights Reserved.

FILE 'DDFB' ACCESS NOT AUTHORIZED

FILE 'DDFU' ACCESS NOT AUTHORIZED

FILE 'DGENE' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 THOMSON DERWENT

FILE 'DRUGB' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 THOMSON DERWENT

FILE 'DRUGMONOG2' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 IMSWORLD Publications Ltd

FILE 'IMSDRUGNEWS' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 IMSWORLD Publications Ltd

FILE 'DRUGU' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 THOMSON DERWENT

FILE 'IMSRESEARCH' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 IMSWORLD Publications Ltd

FILE 'EMBAL' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 Elsevier Inc. All rights reserved.

FILE 'EMBASE' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 Elsevier Inc. All rights reserved.

FILE 'ESBIOBASE' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'FEDRIP' ENTERED AT 08:55:10 ON 05 MAR 2004

FILE 'FOMAD' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 Leatherhead Food Research Association

FILE 'FOREGE' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 Leatherhead Food Research Association

FILE 'FROSTI' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 Leatherhead Food Research Association

FILE 'FSTA' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 International Food Information Service

FILE 'GENBANK' ENTERED AT 08:55:10 ON 05 MAR 2004

FILE 'HEALSAFE' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 Cambridge Scientific Abstracts (CSA)

FILE 'IFIPAT' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 IFI CLAIMS(R) Patent Services (IFI)

FILE 'IMSPRODUCT' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 IMSWORLD Publications Ltd

FILE 'JICST-EPLUS' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 Japan Science and Technology Agency (JST)

FILE 'KOSMET' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 International Federation of the Societies of Cosmetics Chemists

FILE 'LIFESCI' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 Cambridge Scientific Abstracts (CSA)

FILE 'MEDICONF' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 FAIRBASE Datenbank GmbH, Hannover, Germany

FILE 'MEDLINE' ENTERED AT 08:55:10 ON 05 MAR 2004

FILE 'NIOSHTIC' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 U.S. Secretary of Commerce on Behalf of the U.S. Government

FILE 'NTIS' ENTERED AT 08:55:10 ON 05 MAR 2004
Compiled and distributed by the NTIS. U.S. Department of Commerce.

All rights reserved. (2004)

FILE 'NUTRACEUT' ENTERED AT 08:55:10 ON 05 MAR 2004
Copyright 2004 (c) MARKETLETTER Publications Ltd. All rights reserved.

FILE 'OCEAN' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 Cambridge Scientific Abstracts (CSA)

FILE 'PASCAL' ENTERED AT 08:55:10 ON 05 MAR 2004
Any reproduction or dissemination in part or in full,
by means of any process and on any support whatsoever
is prohibited without the prior written agreement of INIST-CNRS.
COPYRIGHT (C) 2004 INIST-CNRS. All rights reserved.

FILE 'PCTGEN' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 WIPO

FILE 'PHAR' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 PJB Publications Ltd. (PJB)

FILE 'PHARMAML' ENTERED AT 08:55:10 ON 05 MAR 2004
Copyright 2004 (c) MARKETLETTER Publications Ltd. All rights reserved.

FILE 'PHIC' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 PJB Publications Ltd. (PJB)

FILE 'PHIN' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 PJB Publications Ltd. (PJB)

FILE 'PROMT' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 Gale Group. All rights reserved.

FILE 'RDISCLOSURE' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 Kenneth Mason Publications Ltd.

FILE 'SCISEARCH' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT 2004 THOMSON ISI

FILE 'SYNTHLINE' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 Prous Science

FILE 'TOXCENTER' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 ACS

FILE 'USPATFULL' ENTERED AT 08:55:10 ON 05 MAR 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 08:55:10 ON 05 MAR 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'VETB' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 THOMSON DERWENT

FILE 'VETU' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 THOMSON DERWENT

FILE 'WPIDS' ENTERED AT 08:55:10 ON 05 MAR 2004
COPYRIGHT (C) 2004 THOMSON DERWENT

FILE 'WPINDEX' ACCESS NOT AUTHORIZED

=> S GFAP OR glial-fibrillary-acidic-protein
13 FILES SEARCHED...
22 FILES SEARCHED...
35 FILES SEARCHED...
50 FILES SEARCHED...
L1 74097 GFAP OR GLIAL-FIBRILLARY-ACIDIC-PROTEIN

=> S nestin
49 FILES SEARCHED...
L2 6079 NESTIN

=> S EGF OR amphiregulin OR FGF OR TGF
30 FILES SEARCHED...
L3 448635 EGF OR AMPHIREGULIN OR FGF OR TGF

=> S L1 AND L2 AND L3
54 FILES SEARCHED...
L4 466 L1 AND L2 AND L3

=> DUP REM L4
DUPLICATE IS NOT AVAILABLE IN 'ADISINSIGHT, ADISNEWS, BIOCOMMERCE, DGENE,
DRUGMONOG2, IMSRESEARCH, FEDRIP, FOREGE, GENBANK, IMSPRODUCT, KOSMET,
MEDICONF, NUTRACEUT, PCTGEN, PHAR, PHARMAML, RDISCLOSURE, SYNTHLINE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L4
L5 269 DUP REM L4 (197 DUPLICATES REMOVED)

=> D L5 1-269

L5 ANSWER 1 OF 269 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 1
AN 10522055 IFIPAT;IFIUDB;IFICDB
TI PROMOTER-BASED ISOLATION, PURIFICATION, EXPANSION, AND TRANSPLANTATION OF
NEURONAL PROGENITOR CELLS, OLIGODENDROCYTE PROGENITOR CELLS, OR NEURAL
STEM CELLS FROM A POPULATION OF EMBRYONIC STEM CELLS
IN Goldman Steven A; Roy Neeta Singh
PA Unassigned Or Assigned To Individual (68000)
PI US 2004029269 A1 20040212
AI US 2003-430822 20030506
PRAI US 2002-378802P 20020507 (Provisional)
FI US 2004029269 20040212
DT Utility; Patent Application - First Publication
FS CHEMICAL
APPLICATION
CLMN 41
GI 17 Figure(s).
FIGS. 1A-B show ***nestin*** -expressing cells arise at the
differentiating margins of human embryonic stem cells. These cells are
maintained in Knockout DMEM (Gibco) supplemented with 20% serum and
express GFP within 3 days of infection by adenoviral ("Ad")E/
Nestin EGFP.
FIGS. 2A-B show E/ ***nestin*** :EGFP recognizes only a minority of
human embryonic stem cells 9 days after passage and 7 days postAdE/
nestin :EGFP infection. The human embryonic stem cells are induced
to form embryonic bodies in Knockout DMEM (Gibco) supplemented with 20%
PBS and continue to express GFP 7 days after infection by AdE/
Nestin EGFP.
FIGS. 3A-B show that FACS selects a distinct population of E/
nestin -driven GFP+. Flow cytometric analysis of ADE/
Nestin :EGFP infected human embryonic stem cells showed that the
EGFP expressing population constituted 5.67+-1.8% (mean+-SD, n=4 samples)
of the total cell population.
FIGS. 4A-B show FACS results which suggest several size ranges of E/
nestin -driven GFP+ cells. Profiles of forward scatter ("FSC") v.
fluorescence intensity ("FL1") reveal the presence of two populations of
nestin + progenitor cells.
FIGS. 5A-B show AdE/ ***Nestin*** :EGFP-induced human embryonic stem
cells can be extracted to near homogeneity by FACS. Following 5 days
after, FACS, in knock out-DMEM supplemented with 20% FBS and RA, the
sorted cells start to form spheres and continue to express ***nestin***
-driven GFP.
FIGS. 6A-B show E/ ***nestin*** :EGFP-sorted-human embryonic stem cells
differentiate largely as neurons and glia with FIG. 6A showing the
results 6 days after treatment with brain derived neurotrophic factor
("BDNF")/neurotrophin-3 ("NT-3") and FIG. 6B showing beta III-tubulin
treatment. Following differentiation in Neurobasal medium supplemented
with B27 (Gibco), NT3, and BDNF and on polyornithine/fibronectin coated
plates for 5 days, beta III-tubulin expression was observed by most of
the ***nestin*** -sorted cells, indicating their neuronal
differentiation and maturation.
FIG. 7 shows highly enriched populations of neurons can be derived from
human embryonic stem cells sorted by FACS on the basis of E/
nestin -driven GFP where the beta III-tubulin promoter is used.
FIGS. 8A-B show adenoviral with T alpha 1 tubulin promoter ("AdT alpha
"):human embryonic stem cells recognize neuronal progenitor cells within
mixed cultures of human embryonic stem cells.
FIGS. 9A-B show AdT alpha :human embryonic stem cells recognize a
population of neuronally-differentiating human embryonic stem cells.
Human embryonic stem cells maintained in KO-DMEM supplemented with 20%
KO-serum exhibited GFP expression by neuronal progenitor cells within 3
days of infection with AdP/T alpha 1-hGFP

from a population of embryonic stem cells.

FIGS. 11A-D demonstrate that lentivirus ("Lenti")-E/ ***Nestin*** :EGFP expression can be seen at the differentiating margins and centers of hES colonies. hES cells maintained in Knockout DMEM/ Knockout replacement serum (Gibco) were infected with Lenti-E/ ***Nestin*** :EGFP virus. EGFP expression was observed 3-4 days after infection. Typically EGFP expression was observed at the edges (FIGS. 11A and B) or center (FIGS. 11C and D) of the hES colonies.

FIGS. 12A-D show that EGFP expression by Lenti-E/ ***Nestin*** :EGFP infected hES cells continues through several generations. LentiE/ ***Nestin*** :EGFP-positive cells maintained their EGFP expression through several generations (at passage 2 in FIGS. 12A-D). The EGFP expression profile was replicated in every passage, with EGFP expression being limited to the differentiating edges (FIGS. 12A and B) and centers (FIGS. 12C and D).

FIGS. 13A-D demonstrate that EGFP expression by Lenti-E/ ***Nestin*** :EGFP infected hES cells continues through several generations without loss in intensity of EGFP expression. LentiE/ ***Nestin*** :EGFP-positive cells continue to maintain their EGFP expression intensity and expression profiles (FIGS. 13A and C, seen at passage three).

FIGS. 14A-B show that Lenti-E/ ***Nestin*** :EGFP expressing cells constitute a large proportion of the hES population. Flow cytometric analysis showed that an average of 12.5% (FIGS. 14A and B) of the Lenti-E/ ***Nestin*** :EGFP infected hES cells expressed EGFP.

FIGS. 15A-B show that FACS purified Lenti-E/ ***Nestin*** :EGFP expressing cells on induction of differentiation gave rise to neurons and glia. When sorted cells are cultured sequentially in the presence of DMEM/F12 supplemented with B-27, basic fibroblast growth factor ("bFGF"), epidermal growth factor ("EGF"), platelet derived growth factor ("PDGF"), and insulinlike growth factor ("IGF") followed by BDNF/NT3, majority of the cells differentiated as III-tubulin expressing neurons (FIG. 15A) and some as ***GFAP*** (FIG. 15A) expressing glia.

FIGS. 16A-F demonstrate that Lenti-Tal:hGFP recognizes neuronal progenitors in mixed hES cell cultures. hES cell cultures infected with Lenti-T alpha 1:hGFP virus start expressing GFP 34 days post-infection. GFP expression is limited to the nucleus (FIGS. 16A, C and E) and observed in cells either in the differentiating center of the hES colonies (FIGS. 16A and E) or in clusters of cells undergoing spontaneous differentiation (FIGS. 16C and D, arrow). From these differentiating clusters, neurons can be seen migrating out (FIG. 16C and D, arrow head).

FIGS. 17A-B show that Lenti-T alpha 1:hGFP is expressed by a significant proportion of the hES population. Flow cytometry analysis of Lenti-T alpha 1:hGFP infected cells indicate that around 7.32% of the total hES cells express GFP driven by the T alpha 1 promoter.

L5 ANSWER 2 OF 269 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 2

AN 04006348 IFIPAT;IFIUDB;IFICDB

TI ENGRAFTABLE HUMAN NEURAL STEM CELLS

IN Kim Seung U (CA); Snyder Evan Y; Wolfe John H

PA Children's Medical Center Corp The
Pennsylvania, University of
(10709, 64664)

PI US 6680198 B1 20040120

AI US 1999-398299 19990920

RLI US 1998-133873 19980814 CONTINUATION 5958767

FI US 6680198 20040120

US 5958767

DT Utility; Granted Patent - Utility, no Pre-Grant Publication

FS CHEMICAL

GRANTED

CLMN 2

GI 9 Drawing Sheet(s), 53 Figure(s).

FIGS. 1A and 1B: The monoclonal nature of each putative human neural stem cell (NSC) clone is confirmed by demonstrating a single retroviral insertion site within the genomes of each. (A) Genomic DNA from the putative human NSC clone H1 (which was propagated in bFGF and subsequently transduced with a retrovirus encoding lacZ and neo) was digested with Hind III (which cuts only once within the provirus) and incubated with a radiolabeled nucleotide probe complementary to neo. Monoclonal derivation is confirmed by the presence of a single integrated retrovirus with an integration site common to all cells in the colony indicating that they were derived from a single infected "parent" cell (arrow). As a positive control, the murine NSC clone C17.2 which contains 2 integrated retroviruses encoding neo (one from an integrated

retrovirus13,28 appropriately shows 2 bands (arrows). Specificity of the probe is demonstrated by the negative control, the human medulloblastoma cell line Daoy, which, having not been infected with a retrovirus, shows no neo sequences in its genome and hence no hybridization product (B). Genomic DNA from putative clones H9, H6, D10, and C2 (human NSC colonies propagated in bFGF and/or ***EGF*** and then subsequently infected with a retrovirus encoding the propagating gene vmc) were digested with Bgl II or Bam HI (each of which cuts only once within the provirus) and then subjected to Southern analysis utilizing a probe complementary to the proviral vmc. Single retroviral integration sites are appreciated in all colonies confirming the monoclonal nature of each putative clone. The murine NSC clone C17.2, which contains a single copy of vmc13,28 and serves as a positive control, also has one band. As in (A), the negative control non-virally infected human Daoy cells, have no bands.

FIGS. 2A-2E: Characterization of human neural stem cells (NSCs) in vitro. (A) NSCs tend to grow as clusters in serum-free bFGF-supplemented medium. They differentiate spontaneously into neurofilament-immunoreactive neurons (B) or CNPase-immunoreactive oligodendrocytes (C) when transferred to serum-containing medium, or into ***GFAP***-expressing astrocytes when cocultured with primary murine CNS cultures (and identified with a human-specific anti-***GFAP*** antibody) as, for example in (D), illustrating a typical type-1 protoplasmic astrocyte. Hence, a single clone has the potential for generating cells of all neural lineages ("multipotency"). New immature, undifferentiated, vimentin-immunoreactive NSCs (E) are present in clones under all conditions, suggesting the ability of a clone to "self-renew" (i.e., produce new multipotent NSCs).

FIGS. 3A-3N: Human neural stem cells (NSCs) are capable of complementing a prototypical gene product deficiency (e.g., beta-hexosaminidase-A) in neural cells of multiple lineages in which the gene is mutated (e.g., brain cells from Tay-Sachs mice). As a proof of principle that human NSCs (like murine NSCs) are capable of cross-correcting a neurogenetic defect, neural cells from the brains of mice with the prototypical neurogenetic disorder Tay-Sachs disease, generated via targeted mutagenesis of the alpha-subunit of beta-hexosaminidase resulting in absence of hexosaminidase-A39, were exposed to secreted gene products from human NSCs to assess their ability to effect complementation of the defect. (A-C) Hexosaminidase activity as determined by NASBG histochemistry (Nomarski optics). Functional hexosaminidase produces a red-pink precipitate with an intensity proportional to the level of activity. (A) Tay-Sachs neural cells (arrows) not exposed to NSCs have no, or minimal, detectable hexosaminidase. (A small number of faintly pink NASBG+ cells are occasionally observed reflecting low residual hexosaminidase-B activity). In comparison, Tay-Sachs neural cells exposed to secretory products from murine NSCs (e.g., clone C17.2H) (B) or from human NSCs (C) now stain intensely red (wildtype intensity) suggesting that they have been cross-corrected, i.e., have internalized significant amounts of functionally active hexosaminidase from the NSC-conditioned medium. (D-L) To help determine which neural cell types from the Tay-Sachs brain were cross-corrected, primary dissociated Tay-Sachs neural cells which had been co-cultured in a transwell system with human NSCs (as in (C)) were reacted both with a fluorescein-labeled antibody to the human alpha-subunit of hexosaminidase (D-F) and with antibodies to neural cell type-specific antigens (visualized by a TR-tagged secondary antibody) (G-I, respectively). Photomicroscopy through a dual filter confirmed co-localization of the alpha-subunit with the cell-type markers (J-L, respectively). A subset of these now alpha-subunit-positive corrected cells (D) were neurons, as indicated by their expression of the neuronal marker NeuN (G,J); a subset of the alpha-subunit+ cells (E) were glial, as illustrated by their co-expression of the glial marker ***GFAP*** (H,K); and a subset of the alpha-subunit+ cells (F) were immature, undifferentiated CNS precursors, as indicated by the presence of the intermediate filament ***nestin*** (I,L). (Untreated cells from a Tay-Sachs brain do not stain for the alpha-subunit). (M) Percentage of successfully rescued (i.e., NASBG+) primary Tay-Sachs neural cells as seen in (A-C). The number of "untreated" Tay-Sachs alpha-subunit-null cells (-/-) (i.e., unexposed to NSCs) that were NASBG+ (1st histogram) was quite low. (That the percentage is not 0 reflects some low residual hexosaminidase-B activity in mutant cells that is sometimes sufficient enough in some cells to produce a pale pink scoreable cell). In contrast, among Tay-Sachs neural cells "treated" with secretory products from murine NSCs (C17.2) (2nd histogram), murine NSCs engineered to over-express hexosaminidase (C17.2H) (3rd histogram), or human NSCs (4th histogram), the percentage of cross-corrected, hexosaminidase-containing cells was significantly increased (p less-than 0.01). The NSCs did not significantly differ from each other in their ability to effect this

positive control and were nearly 100% NASBG+, histogram not presented). (N) Complementation of gene product deficiency results in rescue of a pathologic phenotype in mutated neural cells, as illustrated by percentage of Tay-Sachs CNS cells with diminished GM2 accumulation. Among Tay-Sachs cells not exposed to NSCs (1st histogram), the percentage of GM2+ cells was large reflecting their pathologically high level of storage and consistent with a lack of enzyme as per (M). In contrast, the percentage of cross-corrected Tay-Sachs cells without detectable GM2 storage following exposure to murine (2nd and 3rd histograms, as in (M)) or human NSCs (4th histogram) was significantly lower than in the mutant (p less-than 0.01), approaching that in wildtype (+/+) mouse brain (5th histogram). Again, the NSCs did not significantly differ from each other in their ability to effect this rescue.

FIGS. 4A-4E: Developmentally-appropriate migration of human neural stem cells (NSCs) following engraftment into the subventricular germinal zone (SVZ) of newborn mice. (A,B) Donor-derived human NSCs integrate and intermingle nondisruptively with endogenous progenitors within the host SVZ by 24 hours after transplantation. A representative donor-derived cell with a typical short process highlighted in (A), has interspersed with densely packed endogenous SVZ cells, visualize by DAPI (blue) in the overlapping image in (B). (C) Two weeks following transplantation, many donor-derived cells (red) have migrated extensively within the subcortical white matter (arrow) and corpus callosum (c) from their site of implantation in the lateral ventricles (LV), as visualized in this coronal section. A representative migrating cell within the subcortical white matter (arrow), visualized at higher magnification in the boxed insert, is noted to have a leading process characteristic of migrating precursor cells. (D,E) As seen in this representative cresyl violet-counterstained parasagittal section, other donor-derived cells migrated from their integration site in the anterior SVZ to enter the rostral migratory stream ("RMS") leading to the olfactory bulb ("OB"). Representative BrdU immunoperoxidase-positive (brown) donor-derived cells (arrow) within the RMS, are seen at low power in (D) and visualized at higher magnification in (E), intermixed with migrating host cells. Further characterization and visualization of these donor human NSC-derived cells in their final location in the OB are presented in FIG. 5. Scale Bars: 100 μ m.

FIGS. 5A-5Q: Differentiation and disseminated foreign gene (beta-galactosidase) expression of human neural stem cell (NSC) clones in vivo following engraftment into the SVZ of developing, neonatal mice. (A-C) Stably engrafted, beta-galactosidase (beta gal)-expressing, donor-derived cells from representative human NSC clone H1, detected with Xgal histochemistry (A,B) and with anti-beta gal ICC (C). The donor-derived cells pictured in the series of photomicrographs in (A) are within the periventricular and subcortical white matter regions (as per FIG. 4). (The top and bottom panels-low power on the left, corresponding high power on the right-are from representative semi-adjacent regions within a single recipient, suggesting a significant distribution of cells; arrows indicate the lateral ventricles). Furthermore, as illustrated in (B,C) by representative high power photomicrographs through the olfactory bulb (OB) (located as in FIG. 4D), donor-derived cells from this clone have not only migrated extensively to this developmentally-appropriate site, but continue to express beta gal in this distant location (i.e., in a disseminated fashion in vivo). The normal fate of a subpopulation of SVZ-derived progenitors that have migrated to the OB at this developmental stage is to become neuronal. In (D-G), donor-derived neurons in the mature OB, derived from BrdU-labeled NSCs (representative clone H6) implanted into the SVZ at birth, are identified by both their immunoreactivity to a humanspecific NF antibody (D) as well as their expression of the mature neuronal marker, NeuN (E-G); under confocal microscopy, a BrdU+ (hence, donor-derived) cell (arrow in (E), fluorescein) is NeuN+ (arrow in (F), Texas Red) appreciated best with a dual filter (arrow in (G)). Adjacent to this representative donor-derived BrdU+/NeuN+ neuron (arrow), are 2 host OB neurons (BrdU/NeuN+ in (G)) which share a similar size, morphology, and location with the donor-derived cell (arrow in F). (H,I) High power view of a representative donor-derived (clone H6) oligodendrocyte (arrow), appropriately in the adult subcortical white matter (as per FIG. 4C) following neonatal intraventricular implantation, double-labeled with an antibody to the oligodendrocyte-specific protein CNPase (H) and BrdU (I). Characteristic cytoplasmic processes extending from the soma are noted (arrowhead in (H)). (The morphology of the CNPase+ cell has been somewhat damaged by the HCl pre-treatment required for BrdU double-labeling). (J) Mature donor-derived astrocytes (clone H6) in the adult subcortical white matter (arrow) (as per FIG. 4C) and striatum following neonatal

GFAP antibody. The inset better illustrates at higher magnification the characteristic mature astrocytic morphology of a representative human- ***GFAP*** + cell. (K-Q) Expression of vmyc is downregulated within 48 hours following engraftment. (K), (M), and (O) are DAPI-based nuclear stains of the adjacent panels (L), (N), and (P, Q), respectively. Representative human NSC clone H6 was generated (as was the well-characterized murine NSC clone C17.2) with the propagating gene vmyc. vmyc immunoreactivity in H6-derived cells (red) in the SVZ (arrows) at 24 hours following engraftment ((L) and at higher power in (N)), is persistently absent (P) in integrated H6-derived cells (visualized by BrdU labeling in (Q) (shown here 3 weeks following transplantation, but representative of any point 24 hours after engraftment). Scale Bars: (A), (K) and applies to (L): 100 μ m; (D), (E) and applies to (F,G), (H) and applies to (I), (J), (M) and applies to (N): 10 μ m; (O) and applies to (P,Q): 50 μ m

FIGS. 6A-6J: Neuronal replacement by human neural stem cells (NSCs) following transplantation into the cerebellum of the granule neuron-deficient meander tail (mea) mouse model of neurodegeneration. (A-G) BrdU-intercalated, donor-derived cells (from representative clone H6) identified in the mature cerebellum by anti-BrdU immunoperoxidase cytochemistry (brown nuclei) following implantation into the neonatal mea external germinal layer (EGL). (The EGL, on the cerebellar surface, disappears as the internal granule layer (IGL) emerges to become the deepest cerebellar cortical layer at the end of organogenesis¹³) (A) Clone H6-derived cells are present in the IGL ("igl"; arrowheads) of all lobes of the mature cerebellum in this parasagittal section. (Granule neurons are diminished throughout the cerebellum with some prominence in the anterior lobe). (B) Higher magnification of the representative posterior cerebellar lobe indicated by arrowhead "b" in (A), demonstrating the large number of donor-derived cells present within the recipient IGL. (C-G) Increasing magnifications of donor-derived cells (brown nuclei) within the IGL of a mea anterior cerebellar lobe. (Different animal from that in (A,B).) (G) Normarski optics bring out the similarity in size and morphology of the few residual host, BrdU-negative cerebellar granule neurons (arrowheads) and a BrdU+, donor-derived neuron (arrow), which is representative of those seen in all engrafted lobes of all animals.) (H,I) Confirmation of the neuronal differentiation of a subpopulation of the donor-derived, BrdU+ cells from (A-G) is illustrated by co-labeling with anti-BrdU (green in H) and the mature neuronal marker NeuN (red in I) (indicated with corresponding arrows). (Some adjacent, donor-derived cells are non-neuronal as indicated by their BrdU+ (arrowhead in (H)) but NeuN-phenotype (also illustrating the specificity of the immunostaining). (J) Cells within the IGL are confirmed to be human donor-derived cells by FISH with a human-specific probe (red) identifying human chromosomal centromeres. Scale Bars: (A), (B): 100 μ m; (F), (G), (J): 10 μ m!

L5 ANSWER 3 OF 269 USPTAFULL on STN
AN 2004:44604 USPTAFULL
TI Multipotent neural stemcells from peripheral tissues and uses thereof
IN Toma, Jean, Toronto Ontario, CANADA
Akhavan, Mahnaz, Toronto Ontario, CANADA
Fernandes, Karl J. L., Toronto Ontario, CANADA
Fortier, Mathieu, Orford, CANADA
Miller, Freda, Toronto Ontario, CANADA
Golster, Andrew, Saskatoon Saskatchewan, CANADA
PI US 2004033597 A1 20040219
AI US 2003-181508 A1 20030401 (10)
WO 2001-CA47 20010124
PRAI KR 1999-34362 19990829
DT Utility
FS APPLICATION
LN.CNT 1376
INCL INCLM: 435/368.000
INCLS: 435/371.000
NCL NCLM: 435/368.000
NCLS: 435/371.000
IC [7]
ICM: C12N005-08

L5 ANSWER 4 OF 269 USPTAFULL on STN
AN 2004:18785 USPTAFULL
TI Molecules for diagnostics and therapeutics
IN Hodgson, David M., Ann Arbor, MI, UNITED STATES
Lincoln, Stephen E., Potomac, MD, UNITED STATES

Albany, Peter A., Berkeley, CA, UNITED STATES
 Banville, Steve C., Sunnyvale, CA, UNITED STATES
 Bratcher, Shawn R., Mountain View, CA, UNITED STATES
 Dufour, Gerard E., Castro Valley, CA, UNITED STATES
 Cohen, Howard J., Palo Alto, CA, UNITED STATES
 Rosen, Bruce H., Menlo Park, CA, UNITED STATES
 Chalup, Michael S., Livingston, TX, UNITED STATES
 Jackson, Jennifer L., Santa Cruz, CA, UNITED STATES
 Jones, Anissa L., San Jose, CA, UNITED STATES
 Yu, Jimmy Y., Fremont, CA, UNITED STATES
 Greenawalt, Lila B., San Jose, CA, UNITED STATES
 Panzer, Scott R., Sunnyvale, CA, UNITED STATES
 Roseberry Lincoln, Ann M., Potomac, MD, UNITED STATES
 Wright, Rachel J., Merivale, NEW ZEALAND
 Daniels, Susan E., Mountain View, CA, UNITED STATES
 PA Incyte Corporation, Palo Alto, CA, UNITED STATES (U.S. corporation)
 PI US 2004014087 A1 20040122
 AI US 2003-378029 A1 20030228 (10)
 RLI Continuation-in-part of Ser. No. US 2001-980285, filed on 30 Nov 2001,
 PENDING A 371 of International Ser. No. WO 2000-US15404, filed on 31 May
 2000, PENDING
 PRAI US 1999-147500P 19990805 (60)
 US 1999-147542P 19990805 (60)
 US 1999-147541P 19990805 (60)
 US 1999-147824P 19990805 (60)
 US 1999-147547P 19990805 (60)
 US 1999-147530P 19990805 (60)
 US 1999-147536P 19990805 (60)
 US 1999-147520P 19990805 (60)
 US 1999-147527P 19990805 (60)
 US 1999-147549P 19990805 (60)
 US 1999-147377P 19990804 (60)
 US 1999-147436P 19990804 (60)
 US 1999-137411P 19990603 (60)
 US 1999-137396P 19990603 (60)
 US 1999-137417P 19990603 (60)
 US 1999-137337P 19990603 (60)
 US 1999-137173P 19990602 (60)
 US 1999-137114P 19990602 (60)
 US 1999-137259P 19990602 (60)
 US 1999-137113P 19990602 (60)
 US 1999-137260P 19990602 (60)
 US 1999-137258P 19990602 (60)
 US 1999-137109P 19990602 (60)
 US 1999-137161P 19990601 (60)
 DT Utility
 FS APPLICATION
 LN.CNT 14819
 INCL INCLM: 435/006.000
 INCLS: 435/007.100; 435/069.100; 435/183.000; 435/320.100; 435/325.000;
 530/388.260; 536/023.200; 800/008.000
 NCL NCLM: 435/006.000
 NCLS: 435/007.100; 435/069.100; 435/183.000; 435/320.100; 435/325.000;
 530/388.260; 536/023.200; 800/008.000
 IC [7]
 ICM: C12Q001-68
 ICS: G01N033-53; A01K067-00; C07H021-04; C12N009-00; C12P021-02;
 C12N005-06
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
 L5 ANSWER 5 OF 269 USPATFULL on STN
 AN 2004:13073 USPATFULL
 TI Oligodendrocytes derived from human embryonic stem cells for
 remyelination and treatment of spinal cord injury
 IN Keirstead, Hans S., Irvine, CA, UNITED STATES
 Nistor, Gabriel I., Placentia, CA, UNITED STATES
 PI US 2004009593 A1 20040115
 AI US 2003-406817 A1 20030404 (10)
 PRAI US 2002-395382P 20020711 (60)
 DT Utility
 FS APPLICATION
 LN.CNT 1704
 INCL INCLM: 435/368.000
 NCL NCLM: 435/368.000
 IC [7]

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 6 OF 269 USPATFULL on STN
AN 2004:13072 USPATFULL
TI Genetically-modified neural progenitors and uses thereof
IN Sabate, Olivier, Paris, FRANCE
Horellou, Philippe, Paris, FRANCE
Buc-Caron, Marie-Helene, Paris, FRANCE
Mallet, Jacques, Paris, FRANCE
PA Rhone-Poulenc Rorer S.A. (non-U.S. corporation)
PI US 2004009592 A1 20040115
AI US 2002-305386 A1 20021127 (10)
RLI Continuation of Ser. No. US 1997-810315, filed on 28 Feb 1997, ABANDONED
PRAI US 1996-12635P 19960301 (60)
DT Utility
FS APPLICATION
LN.CNT 1050
INCL INCLM: 435/368.000
NCL NCLM: 435/368.000
IC [7]
ICM: C12N005-08

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 7 OF 269 USPATFULL on STN
AN 2004:7469 USPATFULL
TI Low oxygen culturing of central nervous system progenitor cells
IN Csete, Marie, Ann Arbor, MI, UNITED STATES
Doyle, John, South Pasadena, CA, UNITED STATES
Wold, Barbara J., San Marino, CA, UNITED STATES
McKay, Ron, Bethesda, MD, UNITED STATES
Studer, Lorenz, New York, NY, UNITED STATES
PA California Institute of Technology (U.S. corporation)
National Institutes of Health (U.S. corporation)
PI US 2004005704 A1 20040108
AI US 2003-462896 A1 20030613 (10)
RLI Division of Ser. No. US 1999-425462, filed on 22 Oct 1999, GRANTED, Pat.
No. US 6610540 Continuation-in-part of Ser. No. US 1998-195569, filed on
18 Nov 1998, GRANTED, Pat. No. US 6184035
DT Utility
FS APPLICATION
LN.CNT 2349
INCL INCLM: 435/368.000
NCL NCLM: 435/368.000
IC [7]
ICM: C12N005-08

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 8 OF 269 USPATFULL on STN
AN 2004:7427 USPATFULL
TI Potential growth factors from the human tumour cell line ht 1080
IN Minger, Stephen L., London, UNITED KINGDOM
Adams, Gregor, London, UNITED KINGDOM
Francis, Paul, London, UNITED KINGDOM
McClure, Myra, London, UNITED KINGDOM
PI US 2004005661 A1 20040108
AI US 2003-344503 A1 20030708 (10)
WO 2001-GB3523 20010806
PRAI GB 2000-19705 20000810
DT Utility
FS APPLICATION
LN.CNT 1664
INCL INCLM: 435/069.100
INCLS: 435/226.000; 435/320.100; 435/366.000; 530/350.000; 536/023.200
NCL NCLM: 435/069.100
NCLS: 435/226.000; 435/320.100; 435/366.000; 530/350.000; 536/023.200
IC [7]
ICM: C12N009-64
ICS: C07H021-04; C12N005-08; C07K014-47; C12P021-02

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 9 OF 269 MEDLINE on STN
AN 2004106946 IN-PROCESS
DN PubMed ID: 14973190
TI Mitotic and neurogenic effects of dehydroepiandrosterone (DHEA) on human
neural stem cell cultures derived from the fetal cortex.

Clive N
CS Departments of Anatomy and Neurology and the Waisman Center, University of
Wisconsin, 1500 Highland Avenue, Madison, WI 53705-2280.
SO Proceedings of the National Academy of Sciences of the United States of
America, (2004 Mar 2) 101 (9) 3202-7.
Journal code: 7505876. ISSN: 0027-8424.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS IN-DATA-REVIEW; IN-PROCESS; NONINDEXED; Priority Journals
ED Entered STN: 20040304
Last Updated on STN: 20040304

L5 ANSWER 10 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 3
AN 2004:111060 BIOSIS
DN PREV200400112924
TI Improved neural progenitor cell survival when cogenerated with chromaffin
cells in the rat striatum.
AU Schumm, Michael A.; Castellanos, Daniel A.; Frydel, Beata R.; Sagen,
Jacqueline [Reprint Author]
CS Miami Project to Cure Paralysis, University of Miami School of Medicine,
1095 NW 14th Terrace, Lois Pope Life Center, R-48, Miami, FL, 33136, USA
jsagen@miami.edu
SO Experimental Neurology, (January 2004) Vol. 185, No. 1, pp. 133-142.
print.
CODEN: EXNEAC. ISSN: 0014-4886.
DT Article
LA English
ED Entered STN: 25 Feb 2004
Last Updated on STN: 25 Feb 2004

L5 ANSWER 11 OF 269 DISSABS COPYRIGHT (C) 2004 ProQuest Information and
Learning Company; All Rights Reserved on STN
AN 2004:462 DISSABS Order Number: AAIC812759 (not available for sale by
UMI)
TI Neuronal and glial differentiation of expanded neural stem and progenitor
cells; in vitro and after transplantation
AU Eriksson, Cecilia Jenny [Ph.D.]
CS Lunds Universitet (Sweden) (0899)
SO Dissertation Abstracts International, (2003) Vol. 64, No. 3C, p. 613.
Order No.: AAIC812759 (not available for sale by UMI). 151 pages.
ISBN: 91-628-5666-9.
DT Dissertation
FS DAI
LA English
ED Entered STN: 20040107
Last Updated on STN: 20040107

L5 ANSWER 12 OF 269 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
AN 2003-23517 BIOTECHDS
TI Making a cDNA library, useful for treating neurodegenerative diseases,
e.g. Parkinson's or Alzheimer's disease, comprises proliferating
multipotent neural stem cells on an adherent substrate or in a suspension
culture;
cell culture differentiation and proliferation and DNA library
production for use in gene therapy and tissue engineering
AU WEISS S; REYNOLDS B; HAMMANG J P; BAETGE E E
PA WEISS S; REYNOLDS B; HAMMANG J P; BAETGE E E
PI US 2003109008 12 Jun 2003
AI US 2002-199830 19 Jul 2002
PRAI US 2002-199830 19 Jul 2002; US 1991-726812 8 Jul 1991
DT Patent
LA English
OS WPI: 2003-626207 [59]

L5 ANSWER 13 OF 269 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
AN 2003-22551 BIOTECHDS
TI Proliferating a culture of undifferentiated neural cells containing
multipotent neural stem cells for treating neural disorders by culturing
the cells in a culture medium containing a proliferation-inducing growth
factor;
stem cell proliferation and differentiation for use in tissue
engineering and gene therapy
AU WETTS S; REYNOLDS B; HAMMANG J P; BAETGE E E

PI US 2003095956 22 May 2003
AI US 2002-199918 19 Jul 2002
PRAI US 2002-199918 19 Jul 2002; US 1991-726812 8 Jul 1991
DT Patent
LA English
OS WPI: 2003-606402 [57]

L5 ANSWER 14 OF 269 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 6
AN 2003:174222 CAPLUS
DN 138:217803
TI Microarrays for cell phenotyping and manipulation
IN Brown, Patrick O.; Soen, Yoav; Keen, Erica
PA USA
SO U.S. Pat. Appl. Publ., 29 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003044389	A1	20030306	US 2002-190425	20020702
	WO 2003058193	A2	20030717	WO 2002-US21162	20020702
	W: AU, CA, JP				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT,				
	LU, MC, NL, PT, SE, SK, TR				
PRAI	US 2001-303109P	P	20010702		

L5 ANSWER 15 OF 269 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 7
AN 10481730 IFIPAT;IFIUDB;IFICDB
TI CANCER MODELS
IN Bachoo Robert M; Depinho Ronald A
PA Unassigned Or Assigned To Individual (68000)
PI US 2003226159 A1 20031204
AI US 2003-414460 20030415
PRAI US 2002-373139P 20020416 (Provisional)
US 2002-374791P 20020422 (Provisional)
FI US 2003226159 20031204
DT Utility; Patent Application - First Publication
FS CHEMICAL
APPLICATION
CLMN 29
GI 5 Figure(s).

FIG. 1. Comparison of Ink4a/Arf+/+ and -/-neural stem cells (NSCs) and astrocytes. A. NSC morphology (upper panels) and ***nestin*** staining (inset upper panels) of neurospheres is similar for Ink4a/Arf+/+ and -/-cultures. Astrocyte morphology (lower panels) and ***GFAP*** staining (inset lower panels) is also similar between Ink4a/Arf+/+ and -/-cultures. B. The total number of ***EGF*** responsive NSCs isolated from Ink4a/Arf+/+ and -/-brains at E8.5 (n=4), E10.5 (n=9), E13.5 (n=38), E17.5 (n=12), P1 (n=16), and adult (6 weeks, n=4). C. The total number of neurospheres generated in defined media with ***EGF*** (20 ng/mL), without ***EGF***, and with PDGF (50 ng/mL). Data represent the means +/-the standard error of the mean (SEM) of the number of stem cells residing in the striatal germinal zone at E13.5 (n=32-38 embryos per genotype). D. Differentiation of Ink4a/Arf-/-NSCs (***nestin*** positive) into astrocytes (***GFAP*** positive, lower left) in response to serum and neurons (TUJ1, lower right) in response to BDNF.

FIG. 2. p16INK4a and p19ARF cooperate to regulate the growth of astrocytes but not NSCs. Growth during serial passage by Ink4a/Arf genotype for A. NSCs and B. astrocytes. C. Number of persistently growing astrocytes lines (i.e., "non-senesced"; Sharpless et al., Nature, 413:86-91 (2001)) by passage and p16INK4a and p19ARF status. D. western blot analysis of p16INK4a and p19ARF in NSCs and astrocytes by Ink4a/Arf genotype. +Control=p16INK4a and p19ARF overexpressing tumor cell line.

FIG. 3. Ink4a/Arf-/-astrocytes dedifferentiate to ***nestin*** +, A2B5+ progenitor cells in vitro. Ink4a/Arf+/+ (A) and -/-(B) cells were removed from serum and grown in ***EGF*** on day 0. Ink4a/Arf-/-cells rapidly change morphology and resulting bipolar cells and neurospheres are ***nestin*** + and A2B5+ (double labeling inset, far right panel of B), whereas Ink4a/Arf+/+ cells do not dedifferentiate and remain ***GFAP*** + (inset, far right panel of A). Western blot analysis of cultured astrocytes of indicated genotypes after treatment with ***EGF***. C) Equivalent MAPK, AKT and D) EGFR phosphorylation is seen in Ink4a/Arf-/- and +/+ cells after ***EGF*** exposure.

Ink4a/Arf+/+ (A) and -/- (B) mice after intraventricular ***EGF*** infusion. Images (low and high power H&E, ***nestin*** and olig2 staining) of E) Ink4a/Arf+/+ and F) -/- mice after intraventricular for 7 days of ***EGF***. Arrows (3E) indicate a well differentiated ependymal layer of single cell that is replaced by an expanded population of poorly differentiated progenitor cells (bracket, 3F).

FIG. 4. Expression of EGFR* in Ink4a/Arf-/- NSCs and astrocytes induces high-grade gliomas. Tumors derived from orthotopically transplanted Ink4a/Arf-/-EGFR* (A) NSCs and (B) astrocytes are gadolinium enhancing on MRI, grow as poorly differentiated high grade tumors (40 x H&E), and express ***GFAP***, ***nestin***, and olig2.

FIG. 5. A. p53-/-, p16INK4a-/- and p19ARF-/- astrocytes do not differentiate in response to ***EGF***. Cultures were grown in serum free media supplemented with ***EGF*** (20 ng/mL) for 10 days. In contrast to Ink4a/Arf-/- astrocytes, p53-/-, p16INK4a-/-, and p19ARF-/- astrocytes did not change morphology in response to ***EGF*** and remained ***GFAP*** + and ***nestin*** - (insets represent double labeling with ***GFAP*** (red) and ***nestin*** (green) (n=4 independently derived cell lines for each genotype). B. Ink4a/Arf-/- astrocytes expressing the wild-type EGFR do not dedifferentiate in serum-free media containing without ***EGF***. C. Ink4a/Arf-/- astrocytes expressing EGFR* dedifferentiate in serum-free media lacking ***EGF***. D. Ink4a/Arf+/+ astrocytes expressing EGFR* do not dedifferentiate. E. EGFR* expression in NSCs can substitute for ligand. Ink4a/Arf-/-EGFR* NSC cultures were grown in serum free media without ***EGF***. Ink4a/Arf-/- cultures transduced with the wild-type EGFR do not proliferate under these conditions, but rather undergo apoptosis (not shown). F. Subcutaneous tumors derived from Ink4a/Arf-/- astrocytes transduced with EGFR*. High grade, undifferentiated tumors were ***GFAP*** +, ***nestin*** + and olig2+, similar to intracranially generated tumors. Similar histology and immunoreactivity to ***GFAP***, ***nestin***, and olig2 were found in subcutaneous tumors derived from Ink4a/Arf-/- NSCs transduced with EGFR* (not shown). G. Spindle-cell and epithelioid-cell morphology was seen in 1 tumor each derived from. All tumors demonstrated strong hEGFR* staining and were Sox10 positive as shown here for 1 tumor derived from Ink4a/Arf-/-EGFR* astrocytes.

L5 ANSWER 16 OF 269 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 8
 AN 10463023 IFIPAT;IFIUDB;IFICDB
 TI ISOLATION AND TRANSPLANTATION OF RETINAL STEM CELLS
 IN Klassen Henry J; Mizumoto Keiko (JP); Shatos Marie A; Young Michael J
 PA Unassigned Or Assigned To Individual (68000)
 PI US 2003207450 A1 20031106
 AI US 2002-203105 20020806
 WO 2001-US4419 20010212
 20020806 PCT 371 date
 20020806 PCT 102(e) date
 FI US 2003207450 20031106
 DT Utility; Patent Application - First Publication
 FS CHEMICAL
 APPLICATION
 CLMN 45
 GI 19 Figure(s).

FIG. 1 depicts phase-contrast views (left, A) and green fluorescent protein (GFP) illumination views (right, B) of GFP expressing, neuroretina-derived retinal stem cell spheres at 3 days (top panel) and 6 days (bottom panel) after dissociation into single cell suspension.

FIGS. 2A and 2B are photomicrographs of NRSCs in vitro, labeled with antibodies against retinal stem cell markers: Ki-67, expressed by mitotic cells (left, FIG. 2A) and ***nestin***, an intermediate filament protein in neural stem cells and immature neurons (right, FIG. 2B).

FIGS. 3A and 3B are photomicrographs of neuroretina-derived stem cells after their in vitro exposure to serum, labeled with an antibody against ***glial***, ***fibrillary***, ***acidic***, ***protein***, a marker for astrocytes (anti-***GFAP***, left, FIG. 3A) and an antibody against neurofilament of 200 kD, a marker for mature neurons (antiNF200; right, FIG. 3B).

FIGS. 4A-4D are green fluorescent protein(GFP)-illuminated photomicrographs of four examples of mouse retinal explant recipient tissue (obtained postnatally on day 1), co-cultured with mouse retinal stem cell spheres for 7 days in vitro.

FIGS. 5A and 5B are two exemplary in situ photomicrographs of "green", neuroretina-derived retinal stem cells (derived from GFP-expressing transgenic mice). 2 weeks after being grafted in a host adult rd-2 mouse

photoreceptor-specific marker, rhodopsin.

FIGS. 6A-F are photomicrographs of "green" NRSCs grafted into various retinal sites, 2 weeks post-graft. FIGS. 6A-6C and FIGS. 6D-6F, respectively, show views of the same retinal site, under different illumination: GFP illumination (FIGS. 6A and 6D), red-labeled anti-rhodopsin antibodies (FIGS. 6B and 6E); and ordinary photomicrograph (FIGS. 6F).

FIG. 7 is a confocal photomicrograph of "green" NRSCs grafted into an extra-ocular site, 2 weeks post-graft, labelled with red-labeled, anti-recoverin antibodies.

FIG. 8 is a confocal photomicrograph of "green" NRSCs grafted into a retinal site, 2 weeks post-graft, labelled with anti-recoverin antibodies.

FIGS. 9A and 9B are photomicrographs showing GFP (green, FIG. 9A) and rhodopsin (red, FIG. 9B) expression in RD-2 mouse vitreous, 2 weeks after grafting.

FIGS. 10A-10C are photomicrographs of the same graft site: retinal stem cells grafted to the subretinal space of adult retina "green" NRSC from transgenic GFP-expressing mice, grafted to the subretinal space of adult retina in lesioned B6 mouse subretinal space, 2 weeks after grafting.

FIG. 10A shows GFP expression (green illumination); FIG. 10B shows recoverin expression (staining of cells with red-labeled anti-recoverin antibodies); and FIG. 10C shows an overlay or merged view of FIGS. 11A and 11B.

FIGS. 11A-11C are confocal micrographs of the same graft site: "green" NRSC from transgenic GFP-expressing mice, grafted to the subretinal space of adult retina in lesioned B6 mouse subretinal space, 2 weeks after grafting. FIG. 11A shows GFP expression (green illumination); FIG. 11B shows recoverin expression (staining of cells with red-labeled anti-recoverin antibodies); and FIG. 11C shows an overlay or merged view of FIGS. 11A and 11B.

FIGS. 12A-12C show confocal micrographs of the same graft site: "green" NRSC grafted into lesioned B6 mouse subretinal space, 4 weeks after grafting. FIG. 12A shows recoverin expression (staining of cells with red-labeled anti-recoverin antibodies); FIG. 12B shows GFP expression (green illumination); and FIG. 12C is an overlay or merged view of FIGS. 12A and 12B.

FIG. 13 is a low-power photomicrograph of cultured, human neuroretina-derived stem cells (hNRSCs), showing bipolar, multipolar, and round cells, with neuritic processes.

FIG. 14 is a photomicrograph of hNRSCs undergoing cell division.

FIG. 15 is a low-power photomicrograph of cultured hNRSCs, showing dividing cells and progenitor cells. The cells are observed in another sequence to be non-pigmented.

FIG. 16 is a low-power photomicrograph of cultured hNRSCs, developing long neuritic processes.

FIG. 17 is a phase photomicrograph showing the mitotic profile of hNRSCs.

FIG. 18 is a bright-field photomicrograph of hNRSCs, showing that they are not pigmented.

FIGS. 19A-19C are sequentially timed photomicrographs of the same cultured hNRSC specimen, showing a retinal stem or progenitor cell undergoing cell division. FIG. 19A shows the stem/progenitor cell before mitosis; FIG. 19B shows it during mitosis; and FIG. 19C shows it just after mitosis (with 2 daughter nuclei). FIG. 19C also shows a classic profile of an early, neural stem/progenitor cell.

LS ANSWER 17 OF 269 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 9

AN 10389993 IFIPAT;IFIUDB;IFICDB

TI CELL PRODUCTION

IN Rathjen Joy (AU); Rathjen Peter David (AU)

PA Unassigned Or Assigned To Individual (68000)

PI US 2003134413 A1 20030717

AI US 2002-181359 20021203

WO 2001-AU30 20010112

20021203 PCT 371 date

20021203 PCT 102(e) date

PRAI AU 2000-5098 20000114

AU 2000-7045 20000420

FI US 2003134413 20030717

DT Utility; Patent Application - First Publication

FS CHEMICAL
APPLICATION

CLMN 70

GI 15 Figure(s).

FIG. 1

FIG. 2

FIG. 4
FIG. 5
FIG. 6
FIG. 7
FIG. 8
FIG. 9
FIG. 10
FIG. 11
FIG. 12
FIG. 13
FIG. 14
FIG. 15

L5 ANSWER 18 OF 269 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 10

AN 10337746 IFIPAT;IFIUDB;IFICDB

TI DIFFERENTIATION OF WHOLE BONE MARROW

IN Ehtesham Moneeb; Kabos Peter; Yu John S

PA Unassigned Or Assigned To Individual (68000)

PI US 2003082160 A1 20030501

AI US 2002-253759 20020924

PRAI US 2001-334957P 20011025 (Provisional)

FI US 2003082160 20030501

DT Utility; Patent Application - First Publication

FS CHEMICAL

APPLICATION

CLMN 52

GI 12 Figure(s).

FIG. 1 depicts neural progenitor cells obtained from human bone marrow in accordance with an embodiment of the present invention. FIG. 1A depicts cells from whole bone marrow that, when plated on poly-D-lysine, form a monolayer that gives rise to distinct cellular spheres after four days in culture. FIG. 1B depicts the spheres of FIG. 1A at higher magnification; cells may be easily collected, sub-cultured, and propagated separately in the presence of growth factors. FIG. 1C depicts that the spheres, once differentiated, attach and cells start migrating outward (arrows indicate migrating cells). FIG. 1D depicts that the formed spheres detach from the bottom and afterwards remain free-floating.

FIG. 2 is executed in color and depicts neural progenitor cells obtained from human bone marrow in accordance with an embodiment of the present invention. FIGS. 2A and 2B indicate that neurospheres (i.e., spheres derived from neural cells) and bone marrow-derived spheres, respectively, were morphologically indistinguishable. FIGS. 2C and 2D indicate that the pattern of ***nestin*** expression (red) was similar both in neurospheres and bone marrow derived spheres, respectively. Nuclei of cells appear blue owing to being counterstained with 4',6-diamidino-2phenylindole (DAPI).

FIG. 3 is executed in color and depicts neural progenitor cells obtained from human bone marrow in accordance with an embodiment of the present invention. FIG. 3A indicates that the bone marrow-derived spheres expressed the ectodermal marker vimentin. As depicted in FIG. 3B, a weak staining for fibronectin was also observed in the neural progenitor cells. As depicted in FIG. 3C, bone marrow-derived spheres exhibit strong expression of CD90, and, as depicted in FIG. 3D, the majority of the cells in spheres exhibit nuclear expression of Neurogenin 1.

FIG. 4 is executed in color and depicts a differentiation of bone marrow derived cells into neurons and glia in accordance with an embodiment of the present invention. After plating on a substrate in media devoid of growth factors, the bone marrow-derived spheres attached, migrated away from the primary site of attachment, and displayed multiple morphologies, as depicted in FIG. 4A. FIGS. 4B and 4C depict neural progenitor cells of the present invention expressing the glial cell marker ***glial***
fibrillary ***acidic*** ***protein*** (***GFAP***)

after eight and nine days of differentiation, respectively (cellular nuclei counterstained with DAPI). FIGS. 4D and 4E depict neural progenitor cells of the present invention expressing the neuronal marker Neuron Specific Enolase (NSE) after eight days of differentiation (cellular nuclei counterstained with DAPI). Scattered cells also expressed the later neuronal marker MAP2, as depicted in FIG. 4F. After transplantation of the bone marrow derived spheres into the hippocampus of a syngeneic animal, cells expressing NeuN were found, as depicted in FIG. 4G. Some of these cells appeared to integrate into the hippocampal structure, as depicted in FIG. 4H. FIGS. 4I, 4J and 4K depict a similar differentiation of bone marrow derived cells, with alternate antibodies used for immunocytochemistry. FIG. 4I depicts the use of the oligodendrocyte marker CNPase (1:400 Sigma) at 40 x magnification. while

Chemicon) at 20 x and 40 x magnification, respectively.

FIG. 5 is executed in color and depicts a gene transfer to neural progenitor cells using a beta-galactosidase genebearing replication-deficient adenoviral vector in accordance with an embodiment of the present invention.

FIG. 6 is executed in color and depicts neural progenitor cells infected with green fluorescent protein (GFP) bearing double herpes simplex virus type I in accordance with an embodiment of the present invention.

FIG. 7 is executed in color and depicts neurospheres generated from primary fetal brain culture in accordance with an embodiment of the present invention. FIG. 7A depicts neural progenitor cells grown into spherical aggregates. FIG. 7B depicts *****nestin***** expression by these neurospheres (nuclei counterstained with DAPI). Neurons expressed beta-III tubulin, astrocytes expressed *****GFAP*****, and oligodendrocytes expressed CNPase (FIGS. 7C, 7D, and 7E, respectively). FIG. 7F depicts expression of beta-galactosidase by neural progenitor cells infected in vitro with AdLacZ. Magnification 400 x for FIGS. 7B, 7C, 7D, and 7E; 100 x for FIGS. 7A and 7F.

FIG. 8 is executed in color and depicts an intra-arterial delivery of neural progenitor cells into an experimentally induced ischemic lesion in accordance with an embodiment of the present invention. Single cells are distributed widely throughout the brain tissue (FIG. 8A). Transplanted cells exhibit tropism for injured basal ganglia (FIG. 8B; at 400 x magnification).

FIG. 9 is executed in color and depicts neural progenitor cells tracking tumor cells in vivo in accordance with an embodiment of the present invention. FIG. 9A depicts a thin outgrowth of tumor cells deep into adjacent normal brain. FIG. 9B depicts a direct extension of tumor mass into adjacent tissue. FIG. 9C depicts a migration of glioma cells away from the primary tumor bed along a white matter tract. FIG. 9D depicts a tumor microsatellite independent of a main tumor mass. FIG. 9E depicts a high power photomicrograph of the microsatellite depicted in FIG. 9D; further depicting beta-galactosidasepositive neural progenitor cells interspersed with tumor cells. FIG. 9F shows an inoculation of neural progenitor cells (left panel) and a tumor mass (right panel) into which neural progenitor cells migrated from the opposite hemisphere (inset box). Neural progenitor cells appear blue (expressing betagalactosidase), whereas tumor cells appear red (hypercellular areas stained intensively with neural red). "T" represents tumor mass, outgrowths, and microsatellites. Arrows indicate disseminating neural progenitor cells closely following migrating pockets of tumor.

FIG. 10 is executed in color and depicts intratumoral CD4+ and CD8+ T-cell infiltration in accordance with an embodiment of the present invention. FIG. 10A depicts a flow cytometry analysis demonstrating intratumoral T-cell infiltration in brain tissue treated with neural progenitor cells secreting IL12 (left panel) and 3T3-IL-12 (center panel), and a comparative lack of infiltration in tissue treated with neural progenitor cells secreting LacZ (right panel). CD4+ (left panel) and CD8+ (right panel) intratumoral infiltration is depicted in tissue treated with neural progenitor cells secreting 3T3-IL-12, LacZ, and IL-12 (FIGS. 10B, 10C, and 10D, respectively). Aggregates appeared along the tumor/normal tissue boundary in tissue treated with neural progenitor cells secreting IL-12 (FIG. 10D, arrows indicate aggregates). FIG. 10E depicts a comparison of Tcell infiltration in comparable outgrowths from a primary tumor bed for tissue treated with neural progenitor cells secreting IL-12 and 3Y3-IL-12 (FIGS. 10E, left and right panels, respectively). "T" designates tumor and "N" designates normal brain tissue. Magnification 100 x for FIGS. 10B, 10C, and 10D, and 200 x for FIG. 10E.

FIG. 11 is executed in color and depicts transplantation of neural progenitor cells expressing GFP into rat hippocampus in accordance with an embodiment of the present invention. FIG. 11A depicts a migration of transplanted cells (green). FIG. 11B depicts individual cells expressing NSE (red) and GFP together with NSE (yellow). Transplanted cells were stained for NSE and exhibit GFP (green), NSE (red), and the merged image of green fluorescent protein (GFP) and NSE (green and red) (FIGS. 11C, 11D, and 11E, respectively). Magnification 100 x for FIG. 11A; 630 x for FIG. 11B; and 200 x for FIGS. 11C, 11D, and 11E.

FIG. 12 is executed in color and depicts neural progenitor cells, stained for LacZ, seen in the tumor outgrowth migrating out from the main tumor mass at 10 x (FIG. 12A) and 40 x (FIG. 12B) magnification. The sections were counterstained with hematoxylin.

IN Duncan Ian David; Thomson James A; Zhang Su-Chun
 PA Unassigned Or Assigned To Individual (68000)
 PI US 2003068819 A1 20030410
 AI US 2001-970382 20011003
 FI US 2003068819 20030410
 DT Utility; Patent Application - First Publication
 FS CHEMICAL

APPLICATION
 CLMN 17
 GI 3 Figure(s).

FIGS. 1A-I. Differentiation and isolation of neural precursors from ES cells. (FIG. 1A) An attached EB grown in the presence of FGF2 for 5 days shows flattened cells at the periphery and small elongated cells congregated in the center. (FIG. 1B) By 7 days, many rosette formations (arrows) appeared in the differentiating EB center. The up-right inset is the 1- μ m section of the rosette stained with toluidine blue, showing columnar cells arranged in a tubular structure. Bar=20 μ m. (FIGS. 1C-E) Cells in a cluster of rosettes (low left) and a small forming rosette (center) are positive for *****nestin***** (FIG. 1C) and Musashi-1 (FIG. 1D) whereas the surrounding flat cells are negative. (FIG. 1E) A combined image of FIG. 1C and FIG. 1D with all cell nuclei labeled with DAPI. (FIG. 1F) After treatment with dispase for 20 minutes, the rosette formations retracted whereas the surrounding flat cells remained attached. (FIGS. 1G-I) Isolated cells are positively stained for *****nestin***** in a filamentous pattern (FIG. 1G), Musashi-1 in cytoplasm (FIG. 1H), and PSA-NCAM mainly on membrane (FIG. 1I). All nuclei are stained with DAPI. Bar=100 μ m.

FIGS. 2A-G. Characterization of ES cell-derived neural precursors in vitro. (FIG. 2A) BrdU incorporation by dissociated ES cell-derived neural precursors is elevated in the presence of FGF2 (20 ng/ml) but not with *****EGF***** (20 ng/ml) or LIF (5 ng/ml). This is representative data from one of 3 replicate experiments. * indicates difference between the experimental group and the control group (p less-than 0.01, n=4, student t-test). (FIG. 2B) Differentiation of a cluster of ES cell-derived neural precursors for 3 weeks shows neurite bundles with cells migrating along them. (FIG. 2C) Immunostaining after 3 weeks of differentiation indicates that the majority of cells are beta III-tubulin+ neurons (red) and that only a few cells are *****GFAP***** + astrocytes (green). (FIG. 2D) After 45 days of differentiation, many more *****GFAP***** + astrocytes (green) appear along with NF200+ neurites (red, yellowish due to overlapping with green *****GFAP*****). (FIGS. 2E-G) ES cell-derived neurons with various morphologies express distinct neurotransmitters such as glutamate (FIG. 2E), GABA (FIG. 2F) and the enzyme tyrosine hydroxylase (FIG. 2G). O4+ oligodendrocytes (arrows) are observed after 2 weeks of differentiation in a glial differentiation medium. Bar=100 μ m.

FIGS. 3A-K. Incorporation and differentiation of ES cell-derived neural precursors in vivo. Grafted cells are detected by in situ hybridization with a probe to the human alu-repeat element (FIGS. 3A-E, G) or an antibody to a human-specific nuclear antigen (FIG. 3F). (FIG. 3A) Individual donor cells in the host cortex of an 8-week-old recipient (arrows). (FIG. 3B) Extensive incorporation of ES cell-derived neural precursors in the hippocampal formation. Cells hybridized with the human alu probe are labeled with red dots (pseudo-colored). (FIG. 3C) Incorporated human cells in the vicinity of the hippocampal pyramidal layer at P14. (FIG. 3D) ES cell-derived cells in the septum of a 4-week-old recipient mouse. (FIG. 3E) High power view of an individual donor cell in the hypothalamus. Note the seamless integration between adjacent unlabeled host cells. (FIG. 3F) Donor cells in the striatum of a 4-week-old host, detected with an antibody to a human-specific nuclear antigen. (FIG. 3G) Extensive migration of transplanted cells from the aqueduct into the dorsal midbrain. (FIG. 3H) Human ES cell-derived neuron in the cortex of a 2-week-old host, exhibiting a polar morphology and long processes. The cell is double labeled with antibodies to a human-specific nuclear marker (green) and beta III-tubulin (red). (FIG. 3I) Network of donor-derived axons in the fimbria of the hippocampus, identified with an antibody to human neurofilament. (FIG. 3J) Donor-derived multipolar neuron, double labeled with an antibody recognizing the a and b isoforms of MAP2. (FIG. 3K) ES cell-derived astrocyte in the cortex of a 4-week-old animal, double labeled with the human nuclear marker (green) and an antibody to *****GFAP***** (red). Note that all the double labelings are confocal images and are confirmed by single optical cuts. Bars: FIG. 3A, FIG. 3B, FIG. 3G 200 μ m; FIG. 3C, FIG. 3D 100 μ m; FIG. 3E, FIG. 3F, FIGS. 3H-K 10 μ m.

TI MULTIPOTENT STEM CELLS FROM PERIPHERAL TISSUES AND USES THEREOF; CELLULAR
 COMPOSITION FOR USE IN REGENERATION MEDICINE
 IN Akhavan Mahnaz (CA); Fernandes Karl J L (CA); Fortier Mathieu (CA);
 Miller Freda (CA); Toma Jean (CA)
 PA Unassigned Or Assigned To Individual (68000)
 PI US 2003003574 A1 20030102
 AI US 2002-99539 20020315
 RLI US 2000-490422 20000124 CONTINUATION-IN-PART ABANDONED
 US 2000-670049 20000925 CONTINUATION-IN-PART PENDING
 WO 2001-CA47 20010124 CONTINUATION-IN-PART UNKNOWN
 US 2001-916639 20010726 CONTINUATION-IN-PART PENDING
 US 2001-991480 20011109 CONTINUATION-IN-PART PENDING
 FI US 2003003574 20030102
 DT Utility; Patent Application - First Publication
 FS CHEMICAL
 APPLICATION
 OS CA 138:52348
 CLMN 73
 GI 31 Figure(s).

FIGS. 1A-1G are photographs showing that mouse skin-derived MSCs are nestinpositive and are capable of differentiating into neurons, glia, and smooth muscle cells.

FIG. 2 is a series of photographs showing that neonate and adult mouse skin-derived MSCs express both ***nestin*** (middle row) and fibronectin protein (bottom row).

FIG. 3A is a series of photographs showing western blot analysis for ***nestin***, neurofilament M (NF-M) and ***GFAP*** in cells differentiated from neonate and adult mouse skin-derived MSCs.

FIG. 3B is a series of photographs showing that human skinderived MSCs express ***nestin***.

FIG. 3C is a series of photographs showing that a subset of morphologically complex cells expressed ***nestin*** and beta tubulin, a profile typical of newly-born neurons.

FIG. 3D is a series of photographs showing that GFP positive cells are also positive for neuron-specific enolase.

FIG. 4A is a photograph showing the expression of A2B5, a marker for oligodendrocyte precursors, on undifferentiated mouse skinderived MSCs.

FIG. 4B is a photograph showing the expression of the oligodendrocyte marker galactocerebroside (GaIC) on cells differentiated from mouse skin-derived MSCs.

FIG. 5 is a series of photographs showing that the fate of mouse skin-derived MSCs can be manipulated by controlling plating conditions.

FIG. 6 is a series of photographs showing that neonate and adult mouse skin-derived MSCs can differentiate as adipocytes.

FIGS. 7A and 7B are photographs showing that ***nestin***-positive, fibronectin-positive MSCs can be derived from mouse dermis.

FIGS. 8A and 8B are photographs showing that individual MSCs are multipotent. Clones derived from single cells contained NF-Mpositive cells (arrowheads) and CNPase-positive cells (arrows). Arrowheads indicate cells that only express ***GFAP***, while arrows indicate cells expressing both ***GFAP*** and CNPase.

FIGS. 9A and 9B are photographs of western blot analysis of cells differentiated from mouse skin-derived MSCs (FIG. 9A) or of MSCs themselves (FIG. 9B).

FIG. 10 is a series of photographs showing the effect of various pharmacological agents on mouse skin-derived MSCs.

FIGS. 11A-11E are photographs of immunoprocessed sections of rat brains into which mouse skin-derived MSCs were transplanted.

FIG. 12 shows that ***nestin***+, fibronectin+skin-derived MSCs isolated from adult human scalp differentiate into cells that express a variety of neural and non-neural markers, as measured by immunocytochemistry with antibodies to beta III-tubulin (A), CNPase (B), and smooth muscle actin (C), and ***GFAP*** (D).

FIG. 13 are photographs of skin-derived stem cells plated in 15% FBS in the presence of skeletogenic supplements and cultured for two weeks. The cells are stained with Alcian Blue which reveals nodules of chondrocyte-associated acidic proteoglycans.

FIG. 14 are photographs of skin-derived stem cells plated in 15% FBS in the presence of skeletogenic supplements and cultured for three weeks. The cells are stained with Alizarin Red which identified osteoblast-associated calcium accumulations.

FIG. 15 are photographs of skin-derived stem cells plated in 15% FBS in the presence of skeletogenic supplements, cultured for three weeks, and co-stained with both Alcian Blue and Alizarin Red. Co-staining reveals that the calcium deposits occur within a layer of chondrocytic

FIG. 16 are photographs of skin-derived stem cells plated in 15% FBS in the presence of skeletogenic supplements and cultured for 4-5 weeks, and demonstrate the formation of optically dense deposits indicative of bone formation.

FIG. 17 shows that co-culture of GFP labeled skin-derived stem cells with cardiac myocytes induces expression of fetal cardiac actin. The expression of fetal cardiac actin co-localizes with GFP indicating that the differentiated cell is derived from the skin-derived stem cell.

FIG. 18 shows that co-culture of GFP labeled skin-derived stem cells with C2C12 cells induces expression of desmin. The expression of desmin co-localizes with GFP, and the morphology of this desmin expressing cell is indicative of a skeletal muscle cell.

FIG. 19 shows RT-PCR analysis of skin-derived MSCs grown in spheres (S), plated in proliferation media for three days (3d), or plated in proliferation media for three days followed by two days in 5% serum (3d+2). The skin-derived MSCs express *****nestin*****, GATA-4, and Myf6. Positive controls (+ve) are: E10 brain (for *****nestin*****), embryoid bodies (for GATA-4), and muscle (for Myf6).

FIG. 20 shows that skin-derived MSCs express endodermal markers under certain differentiation conditions. Skin-derived MSCs were cultured under standard proliferation conditions in the presence or absence of B-27 supplement. Differentiation was induced by plating cells in the presence of nicotinamide, and the resulting differentiated cells were analyzed by quantitative RT-PCR. The graph demonstrates that skin-derived MSCs differentiated in the presence of nicotinamide express several markers of endodermal differentiation including GATA-4, HNF3 alpha, Isl1, AFP, HNF3 beta, Ngn3, Pdx-1, and Insulin. Although cells proliferated in either the presence or the absence of B27 supplement can be induced to express endodermal markers, cells proliferated in B27 appear to express such markers to a higher degree.

FIG. 21 shows that agents, including therapeutic proteins and small molecules, influence the proliferation, differentiation, and/or survival of skin-derived stem cells. Cells were dissociated and plated in the presence of either 5% FBS, 5% FBS+retinoic acid (RA), or 5% FBS+BMP7. Cells were analyzed immunocytochemically for expression of neurofilament M (NFM). Note the bottom panels shows a 40 x magnification of the cells.

FIG. 22 shows that the skin-derived stem cells of the invention are a cell population distinct from mesenchymal stem cells. Mesenchymal stem cells and skin-derived stem cells were cultured under identical conditions, and immunocytochemical analysis was performed using antibodies to *****nestin*****, fibronectin, vimentin, and cytokeratin. The top panels are photographs of mesenchymal stem cells, and the bottom panels are photographs of the skinderived stem cells. Note not only the differences in protein expression, but also the differences in morphology between the two cell types.

FIG. 23 shows that skin-derived stem cells isolated from human foreskin proliferate as non-adherent clusters in culture. The top panels show that skin-derived stem cells specifically isolated from the dermal layer of human foreskin proliferate as non-adherent clusters. In contrast to human central nervous system derived stem cells, the survival and proliferation of human skin-derived stem cells is not dependent on LIF. The bottom panels show that skin-derived stem cells isolated from foreskin express *****nestin***** and fibronectin.

FIG. 24 shows that skin-derived stem cells isolated from human foreskin differentiate to form highly morphologically complex neurons as assayed by expression of bIII-tubulin and neurofilament-M (NF-M).

FIG. 25 shows that skin-derived stem cells isolated from human foreskin differentiate to form glial cells as assayed by expression of *****GFAP***** and CNP.

FIG. 26 shows that skin-derived stem cells isolated from human foreskin differentiate to form additional neuronal cells types as assayed by expression of S100 and peripherin. S100 is a marker of bipolar cells and peripherin is a marker of peripheral neurons.

FIG. 27 shows that skin-derived stem cells isolated from human foreskin differentiate to form non-neural cell types as assayed by expression of smooth muscle actin.

PI	US 6541255	B1	20030401	
AI	US 1999-398297		19990920	
RLI	US 1998-133873		19980814	CONTINUATION
FI	US 6541255		20030401	5958767
	US 5958767			
DT	Utility			
FS	CHEMICAL			
	GRANTED			
CLMN	4			
GI	6 Drawing Sheet(s), 53 Figure(s).			

FIGS. 1A and 1B: The monoclonal nature of each putative human neural stem cell (NSC) clone is confirmed by demonstrating a single retroviral insertion site within the genomes of each. (A) Genomic DNA from the putative human NSC clone H1 (which was propagated in bFGF and subsequently transduced with a retrovirus encoding lacZ and neo) was digested with Hind III (which cuts only once within the provirus) and incubated with a radiolabeled nucleotide probe complementary to neo. Monoclonal derivation is confirmed by the presence of a single integrated retrovirus with an integration site common to all cells in the colony indicating that they were derived from a single infected "parent" cell (arrow). As a positive control, the murine NSC clone C17.2 which contains 2 integrated retroviruses encoding neo (one from an integrated vmc-encoding retrovirus and one from a separate lacZ-encoding retrovirus13,28 appropriately shows 2 bands (arrows). Specificity of the probe is demonstrated by the negative control, the human medulloblastoma cell line Daoy, which, having not been infected with a retrovirus, shows no neo sequences in its genome and hence no hybridization product. (B) Genomic DNA from putative clones H9, H6, D10, and C2 (human NSC colonies propagated in bFGF and/or ***EGF*** and then subsequently infected with a retrovirus encoding the propagating gene vmc) were digested with Bgl II or Bam HI (each of which cuts only once within the provirus) and then subjected to Southern analysis utilizing a probe complementary to the proviral vmc. Single retroviral integration sites are appreciated in all colonies confirming the monoclonal nature of each putative clone. The murine NSC clone C17.2, which contains a single copy of vmc13,28 and serves as a positive control, also has one band. As in (A), the negative control non-virally infected human Daoy cells, have no bands.

FIGS. 2A-2E: Characterization of human neural stem cells (NSCs) in vitro. (A) NSCs tend to grow as clusters in serum-free bFGF-supplemented medium. They differentiate spontaneously into neurofilament-immunoreactive neurons (B) or CNPase-immunoreactive oligodendrocytes (C) when transferred to serum-containing medium, or into ***GFAP***-expressing astrocytes when cocultured with primary murine CNS cultures (and identified with a human-specific anti-***GFAP*** antibody) as, for example in (D), illustrating a typical type-1 protoplasmic astrocyte. Hence, a single clone has the potential for generating cells of all neural lineages ("multipotency"). New immature, undifferentiated, vimentin-immunoreactive NSCs (E) are present in clones under all conditions, suggesting the ability of a clone to "self-renew" (i.e., produce new multipotent NSCs).

FIGS. 3A-3N: Human neural stem cells (NSCs) are capable of complementing a prototypical gene product deficiency (e.g., beta-hexosaminidase-A) in neural cells of multiple lineages in which the gene is mutated (e.g., brain cells from Tay-Sachs mice). As a proof of principle that human NSCs (like murine NSCs) are capable of cross-correcting a neurogenetic defect, neural cells from the brains of mice with the prototypical neurogenetic disorder Tay-Sachs disease, generated via targeted mutagenesis of the alpha-subunit of beta-hexosaminidase resulting in absence of hexosaminidase-A39, were exposed to secreted gene products from human NSCs to assess their ability to effect complementation of the defect. (A-C) Hexosaminidase activity as determined by NASBG histochemistry (Nomarski optics). Functional hexosaminidase produces a red-pink precipitate with an intensity proportional to the level of activity. (A) Tay-Sachs neural cells (arrows) not exposed to NSCs have no, or minimal, detectable hexosaminidase. (A small number of faintly pink NASBG+ cells are occasionally observed reflecting low residual hexosaminidase-B activity). In comparison, Tay-Sachs neural cells exposed to secretory products from murine NSCs (e.g., clone C17.2H) (B) or from human NSCs (C) now stain intensely red (wildtype intensity) suggesting that they have been cross-corrected, i.e., have internalized significant amounts of functionally active hexosaminidase from the NSC-conditioned medium. (D-L) To help determine which neural cell types from the Tay-Sachs brain were cross-corrected, primary dissociated Tay-Sachs neural cells which had been co-cultured in a transwell system with human NSCs (as in (C)) were reacted both with a fluorescein-labeled antibody to the human alpha-subunit of hexosaminidase (N-F) and with antibodies to neural cell type-specific

respectively). Photomicroscopy through a dual filter confirmed co-localization of the alpha-subunit with the celltype markers (J-L, respectively). A subset of these now alpha-subunit-positive corrected cells (D) were neurons, as indicated by their expression of the neuronal marker NeuN (G,J); a subset of the alpha-subunit+cells (E) were glial, as illustrated by their co-expression of the glial marker ***GFAP*** (H,K); and a subset of the alpha-subunit+cells (F) were immature, undifferentiated CNS precursors, as indicated by the presence of the intermediate filament ***nestin*** (I,L). (Untreated cells from a Tay-Sachs brain do not stain for the alpha-subunit). (M) Percentage of successfully rescued (i.e., NASBG+) primary TaySachs neural cells as seen in (A-C). The number of "untreated" Tay-Sachs alpha-subunit-null cells (-/-) (i.e., unexposed to NSCs) that were NASBG+(1st histogram) was quite low. (That the percentage is not 0 reflects some low residual hexosaminidase-B activity in mutant cells that is sometimes sufficient enough in some cells to produce a pale pink scoreable cell). In contrast, among Tay-Sachs neural cells "treated" with secretory products from murine NSCs (C17.2) (2nd histogram), murine NSCs engineered to over-express hexosaminidase (C17.2H) (3rd histogram), or human NSCs (4th histogram), the percentage of cross-corrected, hexosaminidase-containing cells was significantly increased (p less-than 0.01). The NSCs did not significantly differ from each other in their ability to effect this rescue. (NASBG staining of neural cells from a wildtype mouse served as a positive control and were nearly 100% NASBG+, histogram not presented). (N) Complementation of gene product deficiency results in rescue of a pathologic phenotype in mutated neural cells, as illustrated by percentage of Tay-Sachs CNS cells with diminished GM2 accumulation. Among Tay-Sachs cells not exposed to NSCs (1st histogram), the percentage of GM2+cells was large reflecting their pathologically high level of storage and consistent with a lack of enzyme as per (M). In contrast, the percentage of cross-corrected Tay-Sachs cells without detectable GM2 storage following exposure to murine (2nd and 3rd histograms, as in (M)) or human NSCs (4th histogram) was significantly lower than in the mutant (p less-than 0.01), approaching that in wildtype (+/+) mouse brain (5th histogram). Again, the NSCs did not significantly differ from each other in their ability to effect this rescue.

FIGS. 4A-4E: Developmentally-appropriate migration of human neural stem cells (NSCs) following engraftment into the subventricular germinal zone (SVZ) of newborn mice. (A,B) Donor-derived human NSCs integrate and intermingle nondisruptively with endogenous progenitors within the host SVZ by 24 hours after transplantation. A representative donor-derived cell with a typical short process (red), highlighted in (A), has interspersed with densely packed endogenous SVZ cells, visualized by DAPI (blue) in the overlapping image in (B). (C) Two weeks following transplantation, many donor-derived cells (red) have migrated extensively within the subcortical white matter (arrow) and corpus callosum (c) from their site of implantation in the lateral ventricles (LV), as visualized in this coronal section. A representative migrating cell within the subcortical white matter (arrow), visualized at higher magnification in the boxed insert, is noted to have a leading process characteristic of migrating precursor cells. (D,E) As seen in this representative cresyl violet-counterstained parasagittal section, other donor-derived cells migrated from their integration site in the anterior SVZ to enter the rostral migratory stream ("RMS") leading to the olfactory bulb ("OB"). Representative BrdU-immunoperoxidase-positive (brown) donor-derived cells (arrow) within the RMS, are seen at low power in (D) and visualized at higher magnification in (E), intermixed with migrating host cells. Further characterization and visualization of these donor human NSC-derived cells in their final location in the OB are presented in FIG. 5. Scale Bars: 100 μ m.

FIGS. 5A-5Q: Differentiation and disseminated foreign gene (beta-galactosidase) expression of human neural stem cell (NSC) clones in vivo following engraftment into the SVZ of developing, neonatal mice. (A-C) Stably engrafted, beta-galactosidase (beta gal)-expressing, donor-derived cells from representative human NSC clone H1, detected with Xgal histochemistry (A,B) and with anti-beta gal ICC (C). The donor-derived cells pictured in the series of photomicrographs in (A) are within the periventricular and subcortical white matter regions (as per FIG. 4). (The top and bottom panels-low power on the left, corresponding high power on the right-are from representative semi-adjacent regions within a single recipient, suggesting a significant distribution of cells; arrows indicate the lateral ventricles). Furthermore, as illustrated in (B,C) by representative high power photomicrographs through the olfactory bulb (OB) (located as in FIG. 4D), donor-derived cells from this clone have not only migrated extensively to this

this distant location (i.e., in a disseminated fashion in vivo). The normal fate of a subpopulation of SVZ-derived progenitors that have migrated to the OB at this developmental stage is to become neuronal. In (D-G), donor-derived neurons in the mature OB, derived from BrdU-labeled NSCs (representative clone H6 implanted into the SVZ at birth, are identified by both their immunoreactivity to a human-specific NF antibody (D) as well as their expression of the mature neuronal marker, NeuN (E-G); under confocal microscopy, a BrdU+ (hence, donor-derived) cell (arrow in (E), fluorescein) is NeuN+ (arrow in (F), Texas Red) appreciated best with a dual filter (arrow in (G)). Adjacent to this representative donor-derived BrdU+/NeuN+ neuron (arrow), are 2 host OB neurons (BrdU/NeuN+ in (G)) which share a similar size, morphology, and location with the donor-derived cell (arrow in F). (H,I) High power view of a representative donor-derived (clone H6) oligodendrocyte (arrow), appropriately in the adult subcortical white matter (as per FIG. 4C) following neonatal intraventricular implantation, double-labeled with an antibody to the oligodendrocyte-specific protein CNPase (H) and BrdU (I). Characteristic cytoplasmic processes extending from the soma are noted (arrowhead in (H)). The morphology of the CNPase+ cell has been somewhat damaged by the HCl pre-treatment required for BrdU double-labeling). (J) Mature donor-derived astrocytes (clone H6) in the adult subcortical white matter (arrow) (as per FIG. 4C) and striatum following neonatal intraventricular implantation, identified with a human-specific anti-***GFAP*** antibody. The inset better illustrates at higher magnification the characteristic mature astrocytic morphology of a representative human-***GFAP***+ cell. (K-Q) Expression of vmc is downregulated within 48 hours following engraftment. (K), (M), and (O) are DAPI-based nuclear stains of the adjacent panels (L), (N), and (P, Q), respectively. Representative human NSC clone H6 was generated (as was the well-characterized murine NSC clone C17.2) with the propagating gene vmc. vmc immunoreactivity in H6-derived cells (red) in the SVZ (arrows) at 24 hours following engraftment ((L) and at higher power in (N)), is persistently absent (P) in integrated H6-derived cells (visualized by BrdU labeling in (Q) (shown here 3 weeks following transplantation, but representative of any point 24 hours after engraftment). Scale Bars: (A), (K) and applies to (L): 100 μ m; (D), (E) and applies to (F,G), (H) and applies to (I), (J), (M) and applies to (N): 10 μ m; (J) and applies to (P,Q): 50 μ m

FIGS. 6A-6J: Neuronal replacement by human neural stem cells (NSCs) following transplantation into the cerebellum of the granule neuron-deficient meander tail (mea) mouse model of neurodegeneration. (A-G) BrdU-intercalated, donor-derived cells (from representative clone H6) identified in the mature cerebellum by anti-BrdU immunoperoxidase cytochemistry (brown nuclei) following implantation into the neonatal mea external germinal layer (EGL). (The EGL, on the cerebellar surface, disappears as the internal granule layer (IGL) emerges to become the deepest cerebellar cortical layer at the end of organogenesis13) (A) Clone H6-derived cells are present in the IGL ("igl"; arrowheads) of all lobes of the mature cerebellum in this parasagittal section. (Granule neurons are diminished throughout the cerebellum with some prominence in the anterior lobe). (B) Higher magnification of the representative posterior cerebellar lobe indicated by arrowhead "b" in (A), demonstrating the large number of donor-derived cells present within the recipient IGL. (C-G) Increasing magnifications of donor-derived cells (brown nuclei) within the IGL of a mea anterior cerebellar lobe. (Different animal from that in (A,B).) (G) Normarski optics bring out the similarity in size and morphology of the few residual host, BrdU-negative cerebellar granule neurons (arrowheads) and a BrdU+, donor-derived neuron (arrow), which is representative of those seen in all engrafted lobes of all animals.) (H,I) Confirmation of the neuronal differentiation of a subpopulation of the donor-derived, BrdU+ cells from (A-G) is illustrated by co-labeling with antiBrdU (green in H) and the mature neuronal marker NeuN (red in I) (indicated with corresponding arrows). (Some adjacent, donor-derived cells are non-neuronal as indicated by their BrdU+ (arrowhead in (H)) but NeuN-phenotype (also illustrating the specificity of the immunostaining). (J) Cells within the IGL are confirmed to be human donor-derived cells by FISH with a human-specific probe (red) identifying human chromosomal centromeres. Scale Bars: (A), (B): 100 μ m; (F), (G), (J): 10 μ m!

PA British Columbia, University of CA
 Children's Medical Center Corp The
 Pennsylvania, University of
 (10709, 11738, 64664)

PI US 6528306 B1 20030304

AI US 1999-398298 19990920

RLI US 1998-133873 19980814 CONTINUATION 5958767

FI US 6528306 20030304

US 5958767

DT Utility

FS CHEMICAL

GRANTED

CLMN 3

GI 6 Drawing Sheet(s), 53 Figure(s).

FIGS. 1A and B: The monoclonal nature of each putative human neural stem cell (NSC) clone is confirmed by demonstrating a single retroviral insertion site within the genomes of each. ((A) Genomic DNA from the putative human NSC clone H1 (which was propagated in bFGF and subsequently transduced with a retrovirus encoding lacZ and neo) was digested with Hind III (which cuts only once within the provirus) and incubated with a radiolabeled nucleotide probe complementary to neo. Monoclonal derivation is confirmed by the presence of a single integrated retrovirus with an integration site common to all cells in the colony indicating that they were derived from a single infected "parent" cell (arrow). As a positive control, the murine NSC clone C17.2 which contains 2 integrated retroviruses encoding neo (one from an integrated vmc-encoding retrovirus and one from a separate lacZ-encoding retrovirus)13,28 appropriately shows 2 bands (arrows). Specificity of the probe is demonstrated by the negative control, the human medulloblastoma cell line Daoy, which, having not been infected with a retrovirus, shows no neo sequences in its genome and hence no hybridization product. (B) Genomic DNA from putative clones H9, H6, D10, and C2 (human NSC colonies propagated in bFGF and/or ***EGF*** and then subsequently infected with a retrovirus encoding the propagating gene vmc) were digested with Bgl II or Bam HI (each of which cuts only once within the provirus) and then subjected to Southern analysis utilizing a probe complementary to the proviral vmc. Single retroviral integration sites are appreciated in all colonies confirming the monoclonal nature of each putative clone. The murine NSC clone C17.2, which contains a single copy of vmc13.28 and serves as a positive control, also has one band. As in (A), the negative control non-virally infected human Daoy cells, have no bands.

FIGS. 2A-2E: Characterization of human neural stem cells (NSCs) in vitro. (A) NSCs tend to grow as clusters in serum-free bFGF-supplemented medium. They differentiate spontaneously into neurofilament-immunoreactive neurons (B) or CNPase-immunoreactive oligodendrocytes (C) when transferred to serum-containing medium, or into ***GFAP***-expressing astrocytes when cocultured with primary murine CNS cultures (and identified with a human-specific anti- ***GFAP*** antibody as, for example in (D), illustrating a typical type-1 protoplasmic astrocyte. Hence, a single one has the potential for generating cells of all neural lineages ("multipotency"). New immature, undifferentiated, vimentin-immunoreactive NSCs (E) are present in clones under all conditions, suggesting the ability of a clone to "self-renew" (i.e., produce new multipotent NSCs).

FIGS. 3A-3N: Human neural stem cells (NSCs) are capable of complementing a prototypical gene product deficiency (e.g., beta-hexosaminidase-A) in neural cells of multiple lineages in which the gene is mutated (e.g., brain cells from Tay-Sachs mice). As a proof of principle that human NSCs (like murine NSCs) are capable of cross-correcting a neurogenetic defect, neural cells from the brains of mice with the prototypical neurogenetic disorder Tay-Sachs disease, generated via targeted mutagenesis of the alpha-subunit of beta-hexosaminidase resulting in absence of hexosaminidase-A39, were exposed to secreted gene products from human NSCs to assess their ability to effect complementation of the defect. (A-C) Hexosaminidase activity as determined by NASBG histochemistry (Nomarski optics). Functional hexosaminidase produces a red-pink precipitate with an intensity proportional to the level of activity. (A) Tay-Sachs neural cells (arrows) not exposed to NSCs have no, or minimal, detectable hexosaminidase. (A small number of faintly pink NASBG+ cells are occasionally observed reflecting low residual hexosaminidase-B activity). In comparison, Tay-Sachs neural cells exposed to secretory products from murine NSCs (e.g., clone C17.2H) (B) or from human NSCs (C) now stain intensely red (wildtype intensity) suggesting that they have been cross-corrected, i.e., have internalized significant amounts of functionally active hexosaminidase from the NSC-conditioned medium. (D-L) To help determine which neural cell types from the Tay-Sachs brain were

been co-cultured in a transwell system with human NSCs (as in (C)) were reacted both with a fluorescein-labeled antibody to the human α -subunit of hexosaminidase (D-F) and with antibodies to neural cell type-specific antigens (visualized by a TR-tagged secondary antibody) (G-I, respectively). Photomicroscopy through a dual filter confirmed co-localization of the α -subunit with the cell-type markers (J-L, respectively). A subset of these now α -subunit-positive corrected cells (D) were neurons, as indicated by their expression of the neuronal marker New N (G,J); a subset of the α -subunit+cells (E) were glia as illustrated by their co-expression of the glial marker *****GFAP***** (H,K); and a subset of the α -subunit+cells (F) were immature, undifferentiated CNS precursors, as indicated by the presence of the intermediate filament *****nestin***** (I,L). (Untreated cells from a Tay-Sachs brain do not stain for the α -subunit). (M) Percentage of successfully rescued (i.e., NASBG+) primary Tay-Sachs neural cells as seen in (A-C). The number of "untreated" Tay-Sachs α -subunit-null cells (-/-) (i.e., unexposed to NSCs) that were NASBG+(1st histogram) was quite low. (That the percentage is not 0 reflects some low residual hexosaminidase-B activity in mutant cells that is sometimes sufficient enough in some cells to produce a pale pink scoreable cell). In contrast, among Tay-Sachs neural cells "treated" with secretory products from murine NSCs (C17.2) (2nd histogram), murine NSCs engineered to over-express hexosaminidase (C17.2H) (3rd histogram), or human NSCs (4th histogram), the percentage of cross-corrected, hexosaminidase-containing cells was significantly increased (p less-than 0.01). The NSCs did not significantly differ from each other in their ability to effect this rescue. (NASBG staining of neural cells from a wildtype mouse served as a positive control and were nearly 100% NASBG+, histogram not presented). (N) Complementation of gene product deficiency results in rescue of a pathologic phenotype in mutated neural cells, as illustrated by percentage of Tay-Sachs CNS cells with diminished GM2 accumulation. Among Tay-Sachs cells not exposed to NSCs (1st histogram), the percentage of GM2+cells was large reflecting their pathologically high level of storage and consistent with a lack of enzyme as per (M). In contrast, the percentage of cross-corrected Tay-Sachs cells without detectable GM2 storage following exposure to murine (2nd and 3rd histograms, as in (M)) or human NSCs (4th histogram) was significantly lower than in the mutant (p less-than 0.01), approaching that in wildtype (+/+) mouse brain (5th histogram). Again, the NSCs did not significantly differ from each other in their ability to effect this rescue.

FIGS. 4A-4E: Developmentally-appropriate migration of human neural stem cells (NSCs) following engraftment into the subventricular germinal zone (SVZ) of newborn mice. (A,B) Donorderived human NSCs integrate and intermingle nondisruptively with endogenous progenitors within the host SVZ by 24 hours after transplantation. A representative donor-derived cell with a typical short process (highlighted in (A)), has interspersed with densely packed endogenous SVZ cells, visualized by DAPI (blue) in the overlapping image in (B). (C) Two weeks following transplantation, many donor-derived cells (red) have migrated extensively within the subcortical white matter (arrow) and corpus callosum (c) from their site of implantation in the lateral ventricles (LV), as visualized in this coronal section. A representative migrating cell within the subcortical white matter (arrow), visualized at higher magnification in the boxed insert, is noted to have a leading process characteristic of migrating precursor cells. (D,E) As seen in this representative cresyl violet-counterstained parasagittal section, other donorderived cells migrated from their integration site in the anterior SVZ to enter the rostral migratory stream ("RMS") leading to the olfactory bulb ("OB"). Representative BrdUimmunoperoxidase-positive (brown) donor-derived cells (arrow) within the RMS, are seen at low power in (D) and visualized at higher magnification in (E), intermixed with migrating host cells. Further characterization and visualization of these donor human NSC-derived cells in their final location in the OB are presented in FIG. 5. Scale Bars: 100 μ m.

FIGS. 5A-5Q: Differentiation and disseminated foreign gene (β -galactosidase) expression of human neural stem cell (NSC) clones in vivo following engraftment into the SVZ of developing, neonatal mice. (A-C) Stably engrafted, β -galactosidase (β gal)-expressing, donor-derived cells from representative human NSC clone H1, detected with Xgal histochemistry (A,B) and with anti- β gal ICC (C). The donorderived cells pictured in the series of photomicrographs in (A) are within the periventricular and subcortical white matter regions (as per FIG. 4). (The top and bottom panels-low power on the left, corresponding high power on the right-are from representative semi-adjacent regions within a single recipient, suggesting a significant distribution of

illustrated in (B,C) by representative high power photomicrographs through the olfactory bulb (OB) (located as in FIG. 4D), donor-derived cells from this clone have not only migrated extensively to this developmentally-appropriate site, but continue to express beta gal in this distant location (i.e., in a disseminated fashion in vivo). The normal fate of a subpopulation of SVZ-derived progenitors that have migrated to the OB at this developmental stage is to become neuronal. In (D-G), donor-derived neurons in the mature OB, derived from BrdU-labeled NSCs (representative clone H6) implanted into the SVZ at birth, are identified by both their immunoreactivity to a human-specific NF antibody (D) as well as their expression of the mature neuronal marker, NeuN (E-G); under confocal microscopy, a BrdU+(hence, donor-derived) cell (arrow in (E), fluorescein) is NeuN+(arrow in (F), Texas Red) appreciated best with a dual filter (arrow in (G)). Adjacent to this representative donor-derived BrdU+/NeuN+neuron (arrow), are 2 host OB neurons (BrdU-/NeuN+in (G)) which share a similar size, morphology, and location with the donor-derived cell (arrow in F). (H,I) High power view of a representative donor-derived (clone H6) oligodendrocyte (arrow), appropriately in the adult subcortical white matter (as per FIG. 4C) following neonatal intraventricular implantation, double-labeled with an antibody to the oligodendrocyte-specific protein CNPase (H) and BrdU (I). Characteristic cytoplasmic processes extending from the soma are noted (arrowhead in (H)). (The morphology of the CNPase+cell has been somewhat damaged by the HCl pre-treatment required for BrdU double-labeling). (J) Mature donor-derived astrocytes (clone H6) in the adult subcortical white matter (arrow) (as per FIG. 4C) and striatum following neonatal intraventricular implantation, identified with a human-specific anti- *****GFAP***** antibody. The inset better illustrates at higher magnification the characteristic mature astrocytic morphology of a representative human- *****GFAP***** +cell. (K-Q) Expression of vmyc is downregulated within 48 hours following engraftment. (K), (M), and (O) are DAPI-based nuclear stains of the adjacent panels (L), (N), and (P, Q), respectively. Representative human NSC clone H6 was generated (as was the well-characterized murine NSC clone C17.2) with the propagating gene vmyc. vmyc immunoreactivity in H6-derived cells (red) in the SVZ (arrows) at 24 hours following engraftment ((L) and at higher power in (N)), is persistently absent (P) in integrated H6-derived cells (visualized by BrdU labeling in (Q) (shown here 3 weeks following transplantation, but representative of any point 24 hours after engraftment). Scale Bars: (A), (K) and applies to (L): 100 μ m; (D), (E) and applies to (F,G), (H) and applies to (I), (J), (M) and applies to (N): 10 μ m; (O) and applies to (P,Q): 50 μ m

FIGS. 6A-6J: Neuronal replacement by human neural stem cells (NSCs) following transplantation into the cerebellum of the granule neuron-deficient meander tail (mea) mouse model of neurodegeneration. (A-G) BrdU-intercalated, donor-derived cells (from representative clone H6) identified in the mature cerebellum by anti-BrdU immunoperoxidase cytochemistry (brown nuclei) following implantation into the neonatal mea external germinal layer (EGL). (The EGL, on the cerebellar surface, disappears as the internal granule layer (IGL) emerges to become the deepest cerebellar cortical layer at the end of organogenesis13) (A) Clone H6-derived cells are present in the IGL ("igl"; arrowheads) of all lobes of the mature cerebellum in this parasagittal section. (Granule neurons are diminished throughout the cerebellum with some prominence in the anterior lobe). (B) Higher magnification of the representative posterior cerebellar lobe indicated by arrowhead "b" in (A), demonstrating the large number of donor-derived cells present within the recipient IGL. (C-G) Increasing magnifications of donor-derived cells (brown nuclei) within the IGL of a mea anterior cerebellar lobe. (Different animal from that in (A,B).) (G) Normarski optics bring out the similarity in size and morphology of the few residual host, BrdU-negative cerebellar granule neurons (arrowheads) and a BrdU+, donor-derived neuron (arrow), which is representative of those seen in all engrafted lobes of all animals.) (H,I) Confirmation of the neuronal differentiation of a subpopulation of the donor-derived, BrdU+cells from (A-G) is illustrated by co-labeling with antiBrdU (green in H) and the mature neuronal marker NeuN (red in I) (indicated with corresponding arrows). (Some adjacent, donor-derived cells are non-neuronal as indicated by their BrdU+(arrowhead in (H)) but NeuN-phenotype (also illustrating the specificity of the immunostaining). (J) Cells within the IGL are confirmed to be human donor-derived cells by FISH with a human-specific probe (red) identifying human chromosomal centromeres. Scale Bars: ((A), (B): 100 μ m; (F), (G), (J): 10 μ m!

TI ***TGF*** -alpha polypeptides, functional fragments and methods of
 use therefor
 IN Twardzik, Daniel R., Bainbridge Island, WA, UNITED STATES
 Pernet, Andre, Lake Forest, IL, UNITED STATES
 Felker, Thomas S., Vashon, WA, UNITED STATES
 Paskell, Stefan, Bainbridge Island, WA, UNITED STATES
 Reno, John M., Brier, WA, UNITED STATES
 PI US 2003036509 A1 20030220
 US 6677307 B2 20040113
 AI US 2002-138158 A1 20020501 (10)
 RLI Continuation-in-part of Ser. No. US 2000-641587, filed on 17 Aug 2000,
 PENDING Continuation-in-part of Ser. No. US 2000-559248, filed on 26 Apr
 2000, PENDING Continuation-in-part of Ser. No. US 1999-459813, filed on
 13 Dec 1999, PENDING Continuation-in-part of Ser. No. US 1999-378567,
 filed on 19 Aug 1999, ABANDONED
 DT Utility
 FS APPLICATION
 LN.CNT 2915
 INCL INCLM: 514/012.000
 INCLS: 530/399.000
 NCL NCLM: 514/012.000
 NCLS: 530/300.000; 530/402.000
 IC [7]
 ICM: A61K038-18
 ICS: C07K014-475
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 24 OF 269 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:154584 CAPLUS
 DN 138:201346
 TI Generation of multipotent central nervous system stem cells
 IN U, Hoi Sang
 PA Regents of the University of California, USA
 SO PCT Int. Appl., 62 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003016507	A2	20030227	WO 2002-US9160	20020323
	WO 2003016507	A3	20030515		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
PRAI	US 2001-278510P	P	20010323		

L5 ANSWER 25 OF 269 IFIPAT COPYRIGHT 2004 IFI on STN
 AN 10399316 IFIPAT;IFIUDB;IFICDB
 TI LONG-TERM CELL-CULTURE COMPOSITIONS AND GENETICALLY MODIFIED ANIMALS
 DERIVED THEREFROM
 IN Hayes Eric Shannon (CA); Lacham-Kaplan Orly (AU); Morrison John Roderick (AU); Pera Martin Frederick (AU); Trounson Alan Osborne (AU)
 PI US 2003143737 A1 20030731
 AI US 2000-732520 20001207
 PRAI AU 1999-4495 19991207
 AU 2000-9242 20000807
 AU 2000-1108 20001031
 AU 2000-1109 20001031
 FI US 2003143737 20030731
 DT Utility; Patent Application - First Publication
 FS CHEMICAL
 APPLICATION
 CLMN 44
 GI 11 Figure(s).
 FIG. 1 shows the neural stem cells form a multilayered culture displaying a number of morphologies depending on whether the cells are in direct contact with the tissue culture plate or are part of a secondary layer

of budding structures (FIG. 1B), which will eventually "hatch" generating balls of cells floating in the media. These balls can be cultured in suspension or disaggregated to for growing on tissue culture plates. FIG. 2 shows that the cells are positive for a number of markers consistent with neural stem cells including ****nestin**** (FIG. 2A) and vimentin (FIG. 2B).

FIG. 3 shows A) B) phase contrast images of FNS cells that have been allowed to differentiate by passaging at low density. The cells are positive for markers of differentiated neuronal stem cells. C) shows differentiated neuronal stem cells expressing ****GFAP****, which is a marker of glial cells, using immunofluorescence. D) shows differentiated cells expressing beta-tubulin a marker consistent with neurones using immunofluorescence.

FIG. 4 shows the effect of bFGF (FGF2) on FNS cell proliferation. bFGF ranging in concentration from 0-50 ng/ml was applied to various passage FNS cells (ie passage 2-12). At early passage number the cells show some independence of added growth factors which is lost past passage #5. Optimal bFGF stimulated proliferation of FNS cells occurs at approximately 5 ng/ml.

FIG. 5 shows the effect of ****EGF**** on FNS cell proliferation, ****EGF**** ranging in concentration from 0-50 ng/ml was applied to various passage FNS cells (ie passage 2-12). At early passage number the cells show some independence of added growth factors which is lost past passage #5. Optimal bFGF stimulated proliferation of FNS cells occurs at approximately 5 ng/ml.

FIG. 6 shows the combined effect of ****EGF**** and bFGF on FNS cell proliferation: A) Low concentration and B) high concentration. The combined effect of ****EGF**** and bFGF was tested on FNS cells. An optimal concentration of 2-5 ng/ml was observed for each growth factor when used in combination.

FIG. 7 shows long-term culture of FNS cells in the presence of and absence of ****EGF**** or bFGF. While there appears to be some variation between the various passages it was generally noted that there was little added benefit to adding both ****EGF**** and bFGF over adding bFGF alone to the culture system. However the FNS cells appear to be more responsive to ****EGF**** in the early passages.

FIG. 8 shows the effect of lipid on the propagation of foetal neural stem cells. All cells were propagated in the standard Neurobasal A media (with supplements) in the presence or absence of the Chemically defined lipid concentrate (diluted 1:100).

FIG. 9 shows the characteristics of cells grown in either DMEM/ F12 media or Neurobasal A (plus supplements) media with or without the addition of the chemically defined lipid supplement. A) DMEM/F12-lipid (10 x magnification); B) DMEM/F2-lipid (32 x magnification); C) DMEM/F12+lipid (10 x magnification); D) DMEM/ F12+lipid (20 x magnification); E) Neurobasal A-lipid (10 x magnification); F) Neurobasal A-lipid (32 x magnification); G) Neurobasal A+lipid (10 x magnification); H) Neurobasal A+lipid (20 x magnification)

FIG. 10 shows assessment of FNS cell proliferation using BrdU incorporation at 160 x magnification. A) and C) shows BrdU incorporation into passage #2 and passage #17 cells, respectively; BrdU incorporation is visualised using an mouse monoclonal anti-BrdU (Sigma) in combination with FITC conjugated goat anti-mouse. Photos are paired-there is one shot of BrdU immunofluorescence A) and C), and one shot of the same cells using phase contrast microscopy B) and D).

FIG. 11 shows the histology of tumours formed by the injection of PC12 cells (a neuronal cell tumour line) into SCID mice. Tissues were collected 19 days after injection and stained with H&E. The tumour morphology is consistent with neuroblastoma SCID mice injected with FNS cells (passage # 12) failed to display any signs of tumour formation after 13 weeks.

LS ANSWER 26 OF 269 IFIPAT COPYRIGHT 2004 IFI on STN
AN 3838518 IFIPAT;IFIUDB;IFICDB
TI BONE MARROW CELLS AS A SOURCE OF NEURONS FOR BRAIN AND SPINAL CORD
REPAIR; BONE-MARROW DERIVED NEURONAL CELLS FOR USE IN THE TREATMENT OF
NERVOUS SYSTEM DISORDERS
IN Freeman Thomas; Janssen William; Sanberg Paul; Sanchez-Ramos Juan; Song
Shijie
PA South Florida, University of (16948)
PI US 6528245 B2 20030304
US 2002146821 A1 20021010
AI US 1999-307824 19990507
PRAI US 1998-84533P 19980507 (Provisional)
US 1998-112979P 19981217 (Provisional)

FI US 6528245 20030304
US 2002146821 20021010
DT Utility
FS CHEMICAL
GRANTED
MRN 010150 MFN: 0426
011898 0610
012219 0446
CLMN 5
GI 9 Drawing Sheet(s), 32 Figure(s).

FIG. 1 is a bar graph. BMSC adherent to culture dishes were treated with ***EGF*** (10 ng/ml), RA (0.5 μ M) or RA plus BDNF (10 ng/ml) for 7 days. Each bar represents the mean number (+SEM) of fibronectin immunoreactive cells per visual field (20 x objective) determined in 20 fields per dish in 4 culture dishes. * = p less-than 0.05, two-tailed t-test

FIGS. 2A through 2F are photomicrographs of BMSC from lacZ mice that have been co-cultured with mouse fetal midbrain cells for 2 weeks in N5 medium supplemented with cis-9 retinoic acid (0.5 μ M) and BDNF (10 ng/ml).

FIGS. 3A through 3F are photomicrographs, which illustrate the migration and integration of BMSC into rat midbrain. FIG. 3A (scale bar=500 μ m) shows symmetrical distribution despite unilateral grafting into the striatum. FIG. 3B is a region of the paraventricular nucleus (scale bar=100 μ m). None of the beta-gal+cells are labeled with the red-brown stain (TH-ir). FIGS. 3A (Scale bar=500 μ m), 3B (Scale bar=100 μ m) and 3C (Scale bar=50 μ m) depict cells doubly stained for beta-gal and TH-ir. FIGS. 3D (Scale bar=50 μ m) and 3E (Scale bar=25 μ m) illustrate sections from the red nucleus that have doubly stained for beta-gal and NeuN-ir. FIG. 3F (Scale bar=25 μ m) illustrates beta-gal+cells from the red nucleus also doubly stained for MAP2-ir.

FIGS. 4A through 4F are photomicrographs of a section from rat cerebellar lobule illustrating laminar distribution of betagal+cells in a distribution of Purkinje cells. beta-gal+are colabeled with calbindin immunoreactivity in FIGS. 4A, 4B, and 4C. (Scale bar=100 μ m in 4A, 50 μ m in 4B and 25 μ m in 4C). FIG. 4D shows beta-gal+Purkinje cells co-labeled with GAD-ir (Scale bar=50 μ m). FIG. 4E illustrates dense MAP2-ir fibers enveloping beta-gal+Purkinje cells (Scale bar=25 μ m). FIG. 4F illustrates beta-gal+cells co-labeled with NeuN-ir in the deep cerebellar nucleus (Scale bar=25 μ m).

FIGS. 5A through 5D are photomicrographics showing the production of markers for fibronectin (FIG. 5A) and differentiated BMSC with nerve cell markers (FIGS. 5B, 5C and 5D).

FIG. 6 is a Western blot of the lysates of BMSC conditioned with four different treatments and labeled with ***GFAP*** -ir, ***nestin*** and NeuN. BDNF+RA+N5 induced the strongest expression of nerve cell markers while glial cell markers was most strongly expressed after N5 alone.

FIGS. 7A through 7F are photomicrographs of human BMSC which were co-cultured with fetal rat striatal cells in N5 formulation with BDNF+RA. These figures show that human BMSC (green labeled in FIGS. 7C and 7D and yellow in FIGS. 7E and 7F) can be induced to express neural markers NeuN (FIGS. 7A and 7E) and ***GFAP*** (FIGS. 7B and 7F).

FIG. 8 is a photomicrograph of rat brain, showing that mouse BMSC labeled with red PKH26 also express the neuron marker NeuNir (green fluorescence). In addition, the morphology of the doubly labeled cells is that of neurons.

FIG. 9 is a photomicrograph of rat brain, showing a doubly labelled glial cell. The red fluorescent tracer identifies it as derived from a BMSC, and the green fluorescence is due to ***GFAP*** -ir. Note the morphology is that of a glial cell.

L5 ANSWER 27 OF 269 USPATFULL on STN
AN 2003:324321 USPATFULL
TI Use of human neural stem cells secreting GDNF for treatment of parkinson's and other neurodegenerative diseases
IN Svendsen, Clive N., Madison, WI, UNITED STATES
PI US 2003228295 A1 20031211
AI US 2003-423710 A1 20030425 (10)
PRAI US 2002-375587P 20020425 (60)
DT Utility
FS APPLICATION
LN.CNT 736
INCL INCLM: 424/093.210
INCLS: 435/368.000
NCI NCIM: 424/093.210

IC [7]
ICM: A61K048-00
ICS: C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 28 OF 269 USPATFULL on STN
AN 2003:318230 USPATFULL
TI Myelination of congenitally dysmyelinated forebrains using
oligodendrocyte progenitor cells
IN Goldman, Steven A., South Salem, NY, UNITED STATES
Roy, Neeta Singh, New York, NY, UNITED STATES
Windrem, Martha, New York, NY, UNITED STATES
PI US 2003223972 A1 20031204
AI US 2003-368810 A1 20030214 (10)
PRAI US 2002-358006P 20020215 (60)
DT Utility
FS APPLICATION
LN.CNT 1308
INCL INCLM: 424/093.210
INCLS: 435/368.000; 435/456.000; 435/459.000; 435/458.000
NCL NCLM: 424/093.210
NCLS: 435/368.000; 435/456.000; 435/459.000; 435/458.000
IC [7]
ICM: A61K048-00
ICS: C12N005-08; C12N015-86; C12N015-88; C12N015-87
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 29 OF 269 USPATFULL on STN
AN 2003:300379 USPATFULL
TI Reprogramming cells for enhanced differentiation capacity using
pluripotent stem cells
IN Earp, David J., Oakland, CA, UNITED STATES
Carpenter, Melissa K., Castro Valley, CA, UNITED STATES
Gold, Joseph D., San Francisco, CA, UNITED STATES
Lebkowski, Jane S., Portola Valley, CA, UNITED STATES
Schiff, J. Michael, Menlo Park, CA, UNITED STATES
PI US 2003211603 A1 20031113
AI US 2003-344680 A1 20030212 (10)
WO 2001-US25493 20010814
DT Utility
FS APPLICATION
LN.CNT 1597
INCL INCLM: 435/366.000
NCL NCLM: 435/366.000
IC [7]
ICM: C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 30 OF 269 USPATFULL on STN
AN 2003:299866 USPATFULL
TI Neutral progenitor cells from hippocampal tissue and a method for
isolating and purifying them
IN Goldman, Steven A., South Salem, NY, UNITED STATES
PI US 2003211087 A1 20031113
AI US 2002-181329 A1 20021023 (10)
WO 2001-US1780 20010118
DT Utility
FS APPLICATION
LN.CNT 1199
INCL INCLM: 424/093.210
INCLS: 435/368.000; 435/456.000
NCL NCLM: 424/093.210
NCLS: 435/368.000; 435/456.000
IC [7]
ICM: A61K048-00
ICS: C12N005-08; C12N015-861
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 31 OF 269 USPATFULL on STN
AN 2003:288603 USPATFULL
TI 13 human colon and colon cancer associated proteins
IN Rosen, Craig A., Laytonsville, MD, UNITED STATES
Birse, Charles E., North Potomac, MD, UNITED STATES
PA Human Genome Sciences, Inc., Rockville, MD (U.S. corporation)
PT US 2003203361 A1 20031030

RLI Continuation-in-part of Ser. No. WO 2000-US22157, filed on 11 Aug 2000,
PENDING
PRAI US 1999-148680P 19990813 (60)
DT Utility
FS APPLICATION
LN.CNT 19712
INCL INCLM: 435/006.000
INCLS: 435/007.230; 435/069.300; 435/183.000; 435/320.100; 435/325.000;
536/023.200
NCL NCLM: 435/006.000
NCLS: 435/007.230; 435/069.300; 435/183.000; 435/320.100; 435/325.000;
536/023.200
IC [7]
ICM: C12Q001-68
ICS: G01N033-574; C07H021-04; C12N009-00; C12P021-02; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 32 OF 269 USPATFULL on STN
AN 2003:283103 USPATFULL
TI Enhancing neurotrophin-induced neurogenesis by endogenous neural
progenitor cells by concurrent overexpression of brain derived
neurotrophic factor and an inhibitor of a pro-gliogenic bone
morphogenetic protein
IN Goldman, Steven A., South Salem, NY, UNITED STATES
Chmielnicki, Eva, New York, NY, UNITED STATES
Economides, Aris, Tarrytown, NY, UNITED STATES
PI US 2003199447 A1 20031023
AI US 2003-368809 A1 20030214 (10)
PRAI US 2002-358005P 20020215 (60)
DT Utility
FS APPLICATION
LN.CNT 1728
INCL INCLM: 514/012.000
INCLS: 514/044.000; 424/093.200
NCL NCLM: 514/012.000
NCLS: 514/044.000; 424/093.200
IC [7]
ICM: A61K048-00
ICS: A61K038-18
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 33 OF 269 USPATFULL on STN
AN 2003:258639 USPATFULL
TI 207 human secreted proteins
IN Ni, Jian, Germantown, MD, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
LaFleur, David W., Washington, DC, UNITED STATES
Moore, Paul A., Germantown, MD, UNITED STATES
Olsen, Henrik S., Gaithersburg, MD, UNITED STATES
Rosen, Craig A., Laytonsville, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
Soppet, Daniel R., Centreville, VA, UNITED STATES
Young, Paul E., Gaithersburg, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Florence, Kimberly A., Rockville, MD, UNITED STATES
Wei, Ying-Fei, Berkeley, CA, UNITED STATES
Florence, Charles, Rockville, MD, UNITED STATES
Hu, Jing-Shan, Mountain View, CA, UNITED STATES
Li, Yi, Sunnyvale, CA, UNITED STATES
Kyaw, Hla, Frederick, MD, UNITED STATES
Fischer, Carrie L., Burke, VA, UNITED STATES
Ferrie, Ann M., Painted Post, NY, UNITED STATES
Fan, Ping, Potomac, MD, UNITED STATES
Feng, Ping, Gaithersburg, MD, UNITED STATES
Endress, Gregory A., Florence, MA, UNITED STATES
Dillon, Patrick J., Carlsbad, CA, UNITED STATES
Carter, Kenneth C., North Potomac, MD, UNITED STATES
Brewer, Laurie A., St. Paul, MN, UNITED STATES
Yu, Guo-Liang, Berkeley, CA, UNITED STATES
Zeng, Zhizhen, Lansdale, PA, UNITED STATES
Greene, John M., Gaithersburg, MD, UNITED STATES
PI US 2003181692 A1 20030925
AI US 2001-933767 A1 20010822 (9)
RLI Continuation-in-part of Ser. No. WO 2001-US5614, filed on 21 Feb 2001,
PENDING Continuation-in-part of Ser. No. US 1998-205258, filed on 4 Dec

PRAI	US 2000-184836P	20000224 (60)
	US 2000-193170P	20000329 (60)
	US 1997-48885P	19970606 (60)
	US 1997-49375P	19970606 (60)
	US 1997-48881P	19970606 (60)
	US 1997-48880P	19970606 (60)
	US 1997-48896P	19970606 (60)
	US 1997-49020P	19970606 (60)
	US 1997-48876P	19970606 (60)
	US 1997-48895P	19970606 (60)
	US 1997-48884P	19970606 (60)
	US 1997-48894P	19970606 (60)
	US 1997-48971P	19970606 (60)
	US 1997-48964P	19970606 (60)
	US 1997-48882P	19970606 (60)
	US 1997-48899P	19970606 (60)
	US 1997-48893P	19970606 (60)
	US 1997-48900P	19970606 (60)
	US 1997-48901P	19970606 (60)
	US 1997-48892P	19970606 (60)
	US 1997-48915P	19970606 (60)
	US 1997-49019P	19970606 (60)
	US 1997-48970P	19970606 (60)
	US 1997-48972P	19970606 (60)
	US 1997-48916P	19970606 (60)
	US 1997-49373P	19970606 (60)
	US 1997-48875P	19970606 (60)
	US 1997-49374P	19970606 (60)
	US 1997-48917P	19970606 (60)
	US 1997-48949P	19970606 (60)
	US 1997-48974P	19970606 (60)
	US 1997-48883P	19970606 (60)
	US 1997-48897P	19970606 (60)
	US 1997-48898P	19970606 (60)
	US 1997-48962P	19970606 (60)
	US 1997-48963P	19970606 (60)
	US 1997-48877P	19970606 (60)
	US 1997-48878P	19970606 (60)
	US 1997-57645P	19970905 (60)
	US 1997-57642P	19970905 (60)
	US 1997-57668P	19970905 (60)
	US 1997-57635P	19970905 (60)
	US 1997-57627P	19970905 (60)
	US 1997-57667P	19970905 (60)
	US 1997-57666P	19970905 (60)
	US 1997-57764P	19970905 (60)
	US 1997-57643P	19970905 (60)
	US 1997-57769P	19970905 (60)
	US 1997-57763P	19970905 (60)
	US 1997-57650P	19970905 (60)
	US 1997-57584P	19970905 (60)
	US 1997-57647P	19970905 (60)
	US 1997-57661P	19970905 (60)
	US 1997-57662P	19970905 (60)
	US 1997-57646P	19970905 (60)
	US 1997-57654P	19970905 (60)
	US 1997-57651P	19970905 (60)
	US 1997-57644P	19970905 (60)
	US 1997-57765P	19970905 (60)
	US 1997-57762P	19970905 (60)
	US 1997-57775P	19970905 (60)
	US 1997-57648P	19970905 (60)
	US 1997-57774P	19970905 (60)
	US 1997-57649P	19970905 (60)
	US 1997-57770P	19970905 (60)
	US 1997-57771P	19970905 (60)
	US 1997-57761P	19970905 (60)
	US 1997-57760P	19970905 (60)
	US 1997-57776P	19970905 (60)
	US 1997-57778P	19970905 (60)
	US 1997-57629P	19970905 (60)
	US 1997-57628P	19970905 (60)
	US 1997-57777P	19970905 (60)
	US 1997-57634P	19970905 (60)
	US 1997-70923P	19971218 (60)

US 1998-94657P 19980730 (60)
US 1997-70923P 19971218 (60)
US 1998-92921P 19980715 (60)
US 1998-94657P 19980730 (60)
DT Utility
FS APPLICATION
LN.CNT 32746
INCL INCLM: 536/023.100
INCLS: 530/350.000; 435/325.000; 435/183.000; 435/069.100; 435/320.100
NCL NCLM: 536/023.100
NCLS: 530/350.000; 435/325.000; 435/183.000; 435/069.100; 435/320.100
IC [7]
ICM: C07H021-04
ICS: C12N009-00; C12P021-02; C12N005-06; C07K014-435
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 34 OF 269 USPATFULL on STN
AN 2003:251168 USPATFULL
TI Human embryoid body-derived cells
IN Shablott, Michael J., Baltimore, MD, UNITED STATES
Gearhart, John D., Baltimore, MD, UNITED STATES
PI US 2003175954 A1 20030918
AI US 2001-767421 A1 20010122 (9)
PRAI US 2000-177287P 20000121 (60)
DT Utility
FS APPLICATION
LN.CNT 2867
INCL INCLM: 435/366.000
INCLS: 435/069.100
NCL NCLM: 435/366.000
NCLS: 435/069.100
IC [7]
ICM: C12N005-08
ICS: C12P021-02
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 35 OF 269 USPATFULL on STN
AN 2003:238119 USPATFULL
TI Cultures of human CNS neural stem cells
IN Carpenter, Melissa, Foster City, CA, UNITED STATES
PI US 2003166276 A1 20030904
AI US 2002-328644 A1 20021223 (10)
RLI Division of Ser. No. US 2000-486302, filed on 16 Oct 2000, GRANTED, Pat.
No. US 6498018
DT Utility
FS APPLICATION
LN.CNT 1035
INCL INCLM: 435/368.000
NCL NCLM: 435/368.000
IC [7]
ICM: C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 36 OF 269 USPATFULL on STN
AN 2003:232090 USPATFULL
TI Method for inducing differentiation of embryonic stem cells into
functioning cells
IN Inoue, Kazutomo, Sakyo-ku, JAPAN
Kim, Dohoon, Sakyo-ku, JAPAN
Gu, Yanjun, Sakyo-ku, JAPAN
Ishii, Michiyo, Kamigyo-ku, JAPAN
PI US 2003162290 A1 20030828
AI US 2002-54789 A1 20020125 (10)
DT Utility
FS APPLICATION
LN.CNT 907
INCL INCLM: 435/366.000
INCLS: 435/372.000
NCL NCLM: 435/366.000
NCLS: 435/372.000
IC [7]
ICM: C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 37 OF 269 USPATFULL on STN

TI Cultures, products and methods using stem cells
 IN Weiss, Mark L., Manhattan, KS, UNITED STATES
 Troyer, Deryl L., Manhattan, KS, UNITED STATES
 Davis, Duane, Westmoreland, KS, UNITED STATES
 Mitchell, Kathy E., Manhattan, KS, UNITED STATES
 PA Kansas State University Research Foundation (U.S. corporation)
 PI US 2003161818 A1 20030828
 AI US 2002-83779 A1 20020225 (10)
 DT Utility
 FS APPLICATION
 LN.CNT 1447
 INCL INCLM: 424/093.210
 INCLS: 435/372.000; 514/044.000; 435/368.000
 NCL NCLM: 424/093.210
 NCLS: 435/372.000; 514/044.000; 435/368.000
 IC [7]
 ICM: A61K048-00
 ICS: C12N005-08

L5 ANSWER 38 OF 269 USPATFULL on STN
 AN 2003:231619 USPATFULL
 TI Pluripotent embryonic-like stem cells, compositions, methods and uses thereof
 IN Young, Henry E., Macon, GA, UNITED STATES
 Lucas, Paul A., Poughkeepsie, NY, UNITED STATES
 PI US 2003161817 A1 20030828
 AI US 2001-820320 A1 20010328 (9)
 DT Utility
 FS APPLICATION
 LN.CNT 10419
 INCL INCLM: 424/093.210
 INCLS: 435/366.000
 NCL NCLM: 424/093.210
 NCLS: 435/366.000
 IC [7]
 ICM: A61K048-00
 ICS: C12N005-08

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 39 OF 269 USPATFULL on STN
 AN 2003:213876 USPATFULL
 TI Human embryonic germ cell line and methods of use
 IN Gearhart, John D., Baltimore, MD, UNITED STATES
 Shambloott, Michael Joseph, Baltimore, MD, UNITED STATES
 PA THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE (U.S. corporation)
 PI US 2003148514 A1 20030807
 AI US 2003-359917 A1 20030207 (10)
 RLI Continuation of Ser. No. US 2000-553640, filed on 20 Apr 2000, GRANTED, Pat. No. US 6562619 Continuation of Ser. No. US 1998-52772, filed on 31 Mar 1998, GRANTED, Pat. No. US 6245566 Continuation-in-part of Ser. No. US 1997-989744, filed on 12 Dec 1997, GRANTED, Pat. No. US 6331406 Continuation-in-part of Ser. No. US 1997-829372, filed on 31 Mar 1997, GRANTED, Pat. No. US 6090622
 DT Utility
 FS APPLICATION
 LN.CNT 1855
 INCL INCLM: 435/368.000
 NCL NCLM: 435/368.000
 IC [7]
 ICM: C12N005-08

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 40 OF 269 USPATFULL on STN
 AN 2003:213236 USPATFULL
 TI Neural transplantation using pluripotent neuroepithelial cells
 IN Sinden, John, London, UNITED KINGDOM
 Gray, Jeffrey A., London, UNITED KINGDOM
 Hodges, Helen, London, UNITED KINGDOM
 Kershaw, Timothy, London, UNITED KINGDOM
 Rashid-Doubell, Fiza, Oxford, UNITED KINGDOM
 PI US 2003147873 A1 20030807
 AI US 2003-376119 A1 20030228 (10)
 RLI Continuation of Ser. No. US 2001-760274, filed on 12 Jan 2001, PENDING
 Continuation of Ser. No. US 2000-672606, filed on 28 Sep 2000, PENDING
 Continuation of Ser. No. US 1998-43061. filed on 12 Mar 1998. ABANDONED

UNKNOWN
PRAI GB 1995-18606 19950912
DT Utility
FS APPLICATION
LN.CNT 1038
INCL INCLM: 424/093.210
INCLS: 435/368.000
NCL NCLM: 424/093.210
NCLS: 435/368.000
IC [7]

ICM: A61K048-00
ICS: C12N005-08

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 41 OF 269 USPATFULL on STN
AN 2003:187957 USPATFULL
TI Method of isolating ependymal neural stem cells
IN Frisen, Jonas, Stockholm, SWEDEN
Janson, Ann Marie, Stockholm, SWEDEN
Johansson, Clas, Stockholm, SWEDEN
Momma, Stefan, Spanga, SWEDEN
Clarke, Diana, Stockholm, SWEDEN
Zhao, Ming, Solna, SWEDEN
Lendahl, Urban, Sundbyberg, SWEDEN
Delfani, Kioumars, Solna, SWEDEN

PI US 2003129747 A1 20030710

AI US 2002-326438 A1 20021220 (10)

RLI Continuation of Ser. No. US 1998-104772, filed on 25 Jun 1998, GRANTED,
Pat. No. US 6541247

DT Utility
FS APPLICATION

LN.CNT 1145

INCL INCLM: 435/368.000
INCLS: 424/093.210; 800/009.000

NCL NCLM: 435/368.000
NCLS: 424/093.210; 800/009.000

IC [7]
ICM: A01K067-00
ICS: A61K048-00; C12N005-08

L5 ANSWER 42 OF 269 USPATFULL on STN
AN 2003:172722 USPATFULL
TI Compositions and methods for isolation, propagation, and differentiation
of human stem cells and uses thereof
IN Neuman, Toomas, Santa Monica, CA, UNITED STATES
Levesque, Michel, Beverly Hills, CA, UNITED STATES

PI US 2003118566 A1 20030626

AI US 2002-216677 A1 20020808 (10)

PRAI US 2001-310727P 20010808 (60)
US 2001-312714P 20010816 (60)

DT Utility
FS APPLICATION

LN.CNT 1836

INCL INCLM: 424/093.210
INCLS: 424/093.700; 435/368.000

NCL NCLM: 424/093.210
NCLS: 424/093.700; 435/368.000

IC [7]
ICM: A61K048-00
ICS: C12N005-08

L5 ANSWER 43 OF 269 USPATFULL on STN
AN 2003:166054 USPATFULL
TI Pluripotent stem cells derived without the use of embryos or fetal
tissue

IN Levanduski, Mike, River Vale, NJ, UNITED STATES

PI US 2003113910 A1 20030619

AI US 2001-26420 A1 20011219 (10)

DT Utility
FS APPLICATION

LN.CNT 3528

INCL INCLM: 435/325.000
INCLS: 435/354.000; 435/366.000

NCL NCLM: 435/325.000
NCLS: 435/354.000; 435/366.000

ICM: C12N005-06
ICS: C12N005-08; C12N015-85
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 44 OF 269 USPATFULL on STN
AN 2003:159428 USPATFULL
TI Lineage restricted glial precursors from the central nervous system
IN Rao, Mahendra S., Salt Lake City, UT, UNITED STATES
Noble, Mark, Brighton, NY, UNITED STATES
Mayer-Proschel, Margot, Pittsford, NY, UNITED STATES
PI US 2003109041 A1 20030612
AI US 2002-335354 A1 20021230 (10)
RLI Division of Ser. No. US 2001-736728, filed on 16 Mar 2001, PENDING
Continuation of Ser. No. US 1997-980850, filed on 29 Nov 1997, GRANTED,
Pat. No. US 6235527
DT Utility
FS APPLICATION
LN.CNT 1443
INCL INCLM: 435/368.000
NCL NCLM: 435/368.000
IC [7]
ICM: C12N005-08

L5 ANSWER 45 OF 269 USPATFULL on STN
AN 2003:159426 USPATFULL
TI Enriched central nervous system stem cell and progenitor cell
populations, and methods for identifying, isolating and enriching for
such populations
IN Buck, David W., Heathfield, UNITED KINGDOM
Uchida, Nobuko, Palo Alto, CA, UNITED STATES
Weissman, Irving, Redwood City, CA, UNITED STATES
PI US 2003109039 A1 20030612
AI US 2002-193049 A1 20020711 (10)
RLI Continuation-in-part of Ser. No. US 1999-422844, filed on 21 Oct 1999,
GRANTED, Pat. No. US 6468794
PRAI US 2001-339337P 20011105 (60)
US 1999-119725P 19990212 (60)
DT Utility
FS APPLICATION
LN.CNT 1524
INCL INCLM: 435/368.000
INCLS: 435/007.210
NCL NCLM: 435/368.000
NCLS: 435/007.210
IC [7]
ICM: G01N033-567
ICS: C12N005-08

L5 ANSWER 46 OF 269 USPATFULL on STN
AN 2003:152283 USPATFULL
TI Screening small molecule drugs using neural cells differentiated from
human embryonic stem cells
IN Carpenter, Melissa K., Castro Valley, CA, UNITED STATES
Denham, Jerrod J., San Francisco, CA, UNITED STATES
Inokuma, Margaret S., San Jose, CA, UNITED STATES
Thies, R. Scott, Pleasanton, CA, UNITED STATES
PI US 2003103949 A1 20030605
AI US 2002-157288 A1 20020528 (10)
RLI Continuation-in-part of Ser. No. US 2001-859351, filed on 16 May 2001,
PENDING Continuation-in-part of Ser. No. US 2001-872183, filed on 31 May
2001, PENDING Continuation-in-part of Ser. No. US 2001-888309, filed on
21 Jun 2001, PENDING
PRAI WO 2001-US15861 20010516
US 2000-205600P 20000517 (60)
US 2000-213739P 20000622 (60)
US 2000-257608P 20001222 (60)
DT Utility
FS APPLICATION
LN.CNT 1776
INCL INCLM: 424/093.210
INCLS: 435/004.000; 435/368.000
NCL NCLM: 424/093.210
NCLS: 435/004.000; 435/368.000
IC [7]
TCM: A61K048-00

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 47 OF 269 USPATFULL on STN
AN 2003:134091 USPATFULL
TI Ependymal neural stem cells and method for their isolation
IN Janson, Ann Marie, Stockholm, SWEDEN
Frisen, Jonas, Stockholm, SWEDEN
Johansson, Clas, Stockholm, SWEDEN
Momma, Stefan, Spinga, SWEDEN
Clarke, Diana, Cambridge, MA, UNITED STATES
Zhao, Ming, Solna, SWEDEN
Lendahl, Urban, Stockholm, SWEDEN
Delfani, Kioumars, Solna, SWEDEN
PA NeuroNova AB
PI US 2003092176 A1 20030515
AI US 2002-183728 A1 20020627 (10)
RLI Continuation of Ser. No. US 2001-719001, filed on 12 Jul 2001, ABANDONED
A 371 of International Ser. No. WO 1999-SE1157, filed on 24 Jun 1999,
UNKNOWN
PRAI SE 1998-2264 19980625
DT Utility
FS APPLICATION
LN.CNT 1758
INCL INCLM: 435/368.000
NCL NCLM: 435/368.000
IC [7]
ICM: C12N005-08

L5 ANSWER 48 OF 269 USPATFULL on STN
AN 2003:120321 USPATFULL
TI METHOD FOR NEURAL STEM CELL DIFFERENTIATION USING 5HT1A AGONISTS
IN Rajan, Prithi, Dr., 106 Lynch Street, Rockville, Maryland, UNITED
STATES 20850
Altar, C. Anthony, Mr., 1110 Kenilworth Avenue, Garrett Park,
Maryland, UNITED STATES 20896
PA Psychiatric Genomics, Inc., Gaithersburg, 20878, UNITED STATES, Maryland
(U.S. corporation)
PI US 2003082802 A1 20030501
AI US 2002-175360 A1 20020618 (10)
PRAI US 2001-60299152 20010618
DT Utility
FS APPLICATION
LN.CNT 1784
INCL INCLM: 435/368.000
INCL INCL: 514/001.000
NCL NCLM: 435/368.000
NCL INCL: 514/001.000
IC [7]
ICM: C12N005-08
ICS: C12Q001-68; A61K031-00

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 49 OF 269 USPATFULL on STN
AN 2003:120030 USPATFULL
TI Methods of screening biological agents
IN Weiss, Samuel, Alberta, CANADA
Reynolds, Brent, Alberta, CANADA
Hammang, Joseph P., Barrington, RI, UNITED STATES
Baetge, E. Edward, Barrington, RI, UNITED STATES
PI US 2003082515 A1 20030501
AI US 2002-199189 A1 20020719 (10)
RLI Continuation of Ser. No. US 1995-486313, filed on 7 Jun 1995, PENDING
Continuation-in-part of Ser. No. US 1994-270412, filed on 5 Jul 1994,
ABANDONED Continuation of Ser. No. US 1991-726812, filed on 8 Jul 1991,
ABANDONED Continuation of Ser. No. US 1995-385404, filed on 7 Feb 1995,
ABANDONED Continuation of Ser. No. US 1992-961813, filed on 16 Oct 1992,
ABANDONED Continuation-in-part of Ser. No. US 1991-726812, filed on 8
Jul 1991, ABANDONED Continuation-in-part of Ser. No. US 1994-359945,
filed on 20 Dec 1994, ABANDONED Continuation of Ser. No. US 1994-221655,
filed on 1 Apr 1994, ABANDONED Continuation of Ser. No. US 1992-967622,
filed on 28 Oct 1992, ABANDONED Continuation-in-part of Ser. No. US
1991-726812, filed on 8 Jul 1991, ABANDONED Continuation-in-part of Ser.
No. US 1995-376062, filed on 20 Jan 1995, ABANDONED Continuation of Ser.
No. US 1993-10829, filed on 29 Jan 1993, ABANDONED Continuation-in-part
of Ser. No. US 1991-726812. filed on 8 Jul 1991. ABANDONED

ABANDONED Continuation-in-part of Ser. No. US 1991-726812, filed on 8 Jul 1991, ABANDONED Continuation-in-part of Ser. No. US 1994-311099, filed on 23 Sep 1994, ABANDONED Continuation-in-part of Ser. No. US 1991-726812, filed on 8 Jul 1991, ABANDONED Continuation-in-part of Ser. No. US 1994-338730, filed on 14 Nov 1994, ABANDONED Continuation-in-part of Ser. No. US 1991-726812, filed on 8 Jul 1991, ABANDONED

DT Utility
FS APPLICATION
LN.CNT 3844
INCL INCLM: 435/004.000
INCLS: 435/368.000
NCL NCLM: 435/004.000
NCLS: 435/368.000
IC [7]
ICM: C12Q001-00
ICS: C12N005-08

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 50 OF 269 USPATFULL on STN
AN 2003:119667 USPATFULL
TI Adipose-derived stem cells and lattices
IN Hedrick, Marc H., Encino, CA, UNITED STATES
Katz, Adam J., Charlottesville, VA, UNITED STATES
Llull, Ramon, Mallorca, SPAIN
Futrell, J. William, Pittsburgh, PA, UNITED STATES
Benhaim, Prosper, Encino, CA, UNITED STATES
Lorenz, Hermann Peter, Belmont, CA, UNITED STATES
Zhu, Min, Los Angeles, CA, UNITED STATES
PI US 2003082152 A1 20030501
AI US 2001-952522 A1 20010910 (9)
RLI Continuation-in-part of Ser. No. WO 2000-US6232, filed on 10 Mar 2000,
UNKNOWN
PRAI US 1999-123711P 19990310 (60)
US 1999-162462P 19991029 (60)

DT Utility
FS APPLICATION
LN.CNT 6443
INCL INCLM: 424/093.210
INCLS: 435/366.000
NCL NCLM: 424/093.210
NCLS: 435/366.000
IC [7]
ICM: A61K048-00
ICS: C12N005-08

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 51 OF 269 USPATFULL on STN
AN 2003:113090 USPATFULL
TI ***Nestin*** -expressing hair follicle stem cells
IN Li, Lingna, San Diego, CA, UNITED STATES
Yang, Meng, San Diego, CA, UNITED STATES
PI US 2003077823 A1 20030424
AI US 2002-251657 A1 20020920 (10)
PRAI US 2001-323963P 20010920 (60)
DT Utility
FS APPLICATION
LN.CNT 820
INCL INCLM: 435/366.000
NCL NCLM: 435/366.000
IC [7]
ICM: C12N005-08

L5 ANSWER 52 OF 269 USPATFULL on STN
AN 2003:86333 USPATFULL
TI Trans-differentiation and re-differentiation of somatic cells and
production of cells for cell therapies
IN Page, Raymond, Southbridge, MA, UNITED STATES
Dominko, Tanja, Southbridge, MA, UNITED STATES
Malcuit, Christopher, Hudson, MA, UNITED STATES
PI US 2003059939 A1 20030327
AI US 2002-228296 A1 20020827 (10)
PRAI US 2001-314654P 20010827 (60)
DT Utility
FS APPLICATION
LN.CNT 1215

NCL INCLS: 435/368.000; 435/372.000
NCLM: 435/366.000
NCLS: 435/368.000; 435/372.000
IC [7]
ICM: C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 53 OF 269 USPATFULL on STN
AN 2003:79048 USPATFULL
TI Methods and compositions for the repair and/or regeneration of damaged
myocardium
IN Anversa, Piero, New York, NY, UNITED STATES
PI US 2003054973 A1 20030320
AI US 2002-162796 A1 20020605 (10)
RLI Continuation-in-part of Ser. No. US 2001-919732, filed on 31 Jul 2001,
PENDING
PRAI US 2001-295807P 20010606 (60)
US 2001-295806P 20010606 (60)
US 2001-295805P 20010606 (60)
US 2001-295804P 20010606 (60)
US 2001-295803P 20010606 (60)
DT Utility
FS APPLICATION
LN.CNT 3875
INCL INCLM: 514/001.000
INCLS: 435/372.000
NCL NCLM: 514/001.000
NCLS: 435/372.000
IC [7]
ICM: A61K031-00
ICS: C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 54 OF 269 USPATFULL on STN
AN 2003:71552 USPATFULL
TI In vitro and in vivo proliferation and use of multipotent neural stem
cells and their progeny
IN Weiss, Samuel, Alberta, CANADA
Reynolds, Brent, Alberta, CANADA
Hammang, Joseph P., Barrington, RI, UNITED STATES
Baetge, E. Edward, Barrington, RI, UNITED STATES
PI US 2003049837 A1 20030313
AI US 2001-925911 A1 20010809 (9)
RLI Continuation of Ser. No. US 1995-484203, filed on 7 Jun 1995, GRANTED,
Pat. No. US 6399369 Continuation-in-part of Ser. No. US 1994-270412,
filed on 5 Jul 1994, ABANDONED Continuation of Ser. No. US 1991-726812,
filed on 8 Jul 1991, ABANDONED Continuation of Ser. No. US 1995-385404,
filed on 7 Feb 1995, ABANDONED Continuation of Ser. No. US 1992-961813,
filed on 16 Oct 1992, ABANDONED Continuation-in-part of Ser. No. US
1991-726812, filed on 8 Jul 1991, ABANDONED Continuation-in-part of Ser.
No. US 1994-359945, filed on 20 Dec 1994, ABANDONED Continuation of Ser.
No. US 1994-221655, filed on 1 Apr 1994, ABANDONED Continuation of Ser.
No. US 1992-967622, filed on 28 Oct 1992, ABANDONED Continuation-in-part
of Ser. No. US 1991-726812, filed on 8 Jul 1991, ABANDONED
Continuation-in-part of Ser. No. US 1995-376062, filed on 20 Jan 1995,
ABANDONED Continuation of Ser. No. US 1993-10829, filed on 29 Jan 1993,
ABANDONED Continuation-in-part of Ser. No. US 1991-726812, filed on 8
Jul 1991, ABANDONED Continuation-in-part of Ser. No. US 1993-149508,
filed on 9 Nov 1993, ABANDONED Continuation-in-part of Ser. No. US
1991-726812, filed on 8 Jul 1991, ABANDONED Continuation-in-part of Ser.
No. US 1994-311099, filed on 23 Sep 1994, ABANDONED Continuation-in-part
of Ser. No. US 1991-726812, filed on 8 Jul 1991, ABANDONED
Continuation-in-part of Ser. No. US 1994-338730, filed on 14 Nov 1994,
ABANDONED Continuation-in-part of Ser. No. US 1991-726812, filed on 8
Jul 1991, ABANDONED
DT Utility
FS APPLICATION
LN.CNT 4025
INCL INCLM: 435/368.000
INCLS: 435/384.000
NCL NCLM: 435/368.000
NCLS: 435/384.000
IC [7]
ICM: C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 55 OF 269 USPATFULL on STN
 AN 2003:70949 USPATFULL
 TI DISCOVERY, LOCALIZATION, HARVEST, AND PROPAGATION OF AN FGF2 AND
 BDNF-RESPONSIVE POPULATION OF NEURAL AND NEURONAL PROGENITOR CELLS IN
 THE ADULT HUMAN FOREBRAIN
 IN GOLDMAN, STEVEN A., SOUTH SALEM, NY, UNITED STATES
 NEDERGAARD, MAIKEN, SOUTH SALEM, NY, UNITED STATES
 PI US 2003049234 A1 20030313
 AI US 1999-271969 A1 19990318 (9)
 PRAI US 1998-79226P 19980325 (60)
 DT Utility
 FS APPLICATION
 LN.CNT 1534
 INCL INCLM: 424/093.210
 INCLS: 435/368.000
 NCL NCLM: 424/093.210
 NCLS: 435/368.000
 IC [7]
 ICM: A61K048-00
 ICS: C12N005-08

L5 ANSWER 56 OF 269 USPATFULL on STN
 AN 2003:57546 USPATFULL
 TI Differentiated cells suitable for human therapy
 IN Gold, Joseph D., San Francisco, CA, UNITED STATES
 Lebkowski, Jane S., Portola Valley, CA, UNITED STATES
 PI US 2003040111 A1 20030227
 AI US 2002-141220 A1 20020507 (10)
 RLI Division of Ser. No. US 2001-783203, filed on 13 Feb 2001, PENDING
 Continuation of Ser. No. WO 2001-US44309, filed on 26 Nov 2001, UNKNOWN
 PRAI US 2000-253443P 20001127 (60)
 US 2000-253357P 20001127 (60)
 DT Utility
 FS APPLICATION
 LN.CNT 3280
 INCL INCLM: 435/368.000
 INCLS: 435/370.000; 435/366.000
 NCL NCLM: 435/368.000
 NCLS: 435/370.000; 435/366.000
 IC [7]
 ICM: C12N005-08
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 57 OF 269 USPATFULL on STN
 AN 2003:44877 USPATFULL
 TI Selective antibody targeting of undifferentiated stem cells
 IN Mcwhir, Jim, Midlothian, UNITED KINGDOM
 Gold, Joseph D., San Francisco, CA, UNITED STATES
 Schiff, J. Michael, Menlo Park, CA, UNITED STATES
 PI US 2003032187 A1 20030213
 AI US 2001-995419 A1 20011126 (9)
 PRAI US 2000-253357P 20001127 (60)
 US 2000-253443P 20001127 (60)
 US 2000-253395P 20001127 (60)
 DT Utility
 FS APPLICATION
 LN.CNT 4177
 INCL INCLM: 435/455.000
 INCLS: 435/366.000
 NCL NCLM: 435/455.000
 NCLS: 435/366.000
 IC [7]
 ICM: C12N015-87
 ICS: C12N005-08
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 58 OF 269 USPATFULL on STN
 AN 2003:44871 USPATFULL
 TI Production of radial glial cells
 IN Weiss, Samuel, Calgary, CANADA
 Gregg, Christopher, Calgary, CANADA
 PA Stem Cell Therapeutics Inc., Calgary, AB, CANADA (non-U.S. corporation)
 PI US 2003032181 A1 20030213
 AI US 2002-196549 A1 20020717 (10)
 PRAI CA 2001-2364095 20011130

DT Utility
FS APPLICATION
LN.CNT 1123
INCL INCLM: 435/368.000
NCL NCLM: 435/368.000
IC [7]
ICM: C12N005-08

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 59 OF 269 USPATFULL on STN
AN 2003:44341 USPATFULL
TI Methods and reagents for cell transplantation
IN Lee, Ike W., Norwood, MA, UNITED STATES
Liu, Guizhen, Norwood, MA, UNITED STATES
Hampe, James, Dedham, MA, UNITED STATES
Croissant, Jeffrey D., Scituate, MA, UNITED STATES
PI US 2003031651 A1 20030213
AI US 2002-121501 A1 20020412 (10)
PRAI US 2001-283837P 20010413 (60)
US 2001-298811P 20010615 (60)

DT Utility
FS APPLICATION
LN.CNT 1230
INCL INCLM: 424/093.700
INCLS: 435/366.000
NCL NCLM: 424/093.700
NCLS: 435/366.000
IC [7]
ICM: A61K045-00
ICS: C12N005-08

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 60 OF 269 USPATFULL on STN
AN 2003:37686 USPATFULL
TI Isolated homozygous stem cells, differentiated cells derived therefrom,
and materials and methods for making and using same
IN Yan, Wen Liang, Potomac, MD, UNITED STATES
Huang, Steve Chien-Wen, Germantown, MD, UNITED STATES
Nguyen, Minh-Thanh, Rockville, MD, UNITED STATES
Lin, Hua, N. Potomac, MD, UNITED STATES
Jingqi, Lei, Gaithersburg, MD, UNITED STATES
Khanna, Ruchi, Germantown, MD, UNITED STATES
PI US 2003027331 A1 20030206
AI US 2002-179959 A1 20020626 (10)
RLI Continuation-in-part of Ser. No. US 2001-997240, filed on 30 Nov 2001,
PENDING
PRAI US 2000-253943P 20001130 (60)

DT Utility
FS APPLICATION
LN.CNT 3418
INCL INCLM: 435/366.000
NCL NCLM: 435/366.000
IC [7]
ICM: C12N005-08

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 61 OF 269 USPATFULL on STN
AN 2003:23670 USPATFULL
TI Encapsulated cell indicator system
IN Lee, Ike W., Norwood, MA, UNITED STATES
Ballica, Rabia, Framingham, MA, UNITED STATES
Croissant, Jeffrey D., Scituate, MA, UNITED STATES
PI US 2003017510 A1 20030123
AI US 2002-121295 A1 20020412 (10)
PRAI US 2001-283838P 20010413 (60)

DT Utility
FS APPLICATION
LN.CNT 1074
INCL INCLM: 435/007.210
NCL NCLM: 435/007.210
IC [7]
ICM: G01N033-567

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 62 OF 269 USPATFULL on STN

TI Method of producing region-specific neurons from human neuronal stem cells
IN Wu, Ping, League City, TX, UNITED STATES
PI US 2003013193 A1 20030116
AI US 2002-176971 A1 20020619 (10)
PRAI US 2001-300344P 20010622 (60)
DT Utility
FS APPLICATION
LN.CNT 1375
INCL INCLM: 435/368.000
NCL NCLM: 435/368.000
IC [7]
ICM: C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 63 OF 269 USPATFULL on STN
AN 2003:17440 USPATFULL
TI Method for neural stem cell differentiation using valproate
IN Laeng, Pascal, Washington, DC, UNITED STATES
Mallon, Barbara, Gaithersburg, MD, UNITED STATES
Pitts, Lee, Falls Church, VA, UNITED STATES
PA Psychiatric Genomics, Inc. (U.S. corporation)
PI US 2003013192 A1 20030116
AI US 2002-175168 A1 20020618 (10)
PRAI US 2001-299066P 20010618 (60)
DT Utility
FS APPLICATION
LN.CNT 1725
INCL INCLM: 435/368.000
INCL: 514/557.000
NCL NCLM: 435/368.000
NCL: 514/557.000
IC [7]
ICM: C12N005-08
ICS: A61K031-19
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 64 OF 269 USPATFULL on STN
AN 2003:3443 USPATFULL
TI Identifying and characterizing genes
IN Depinho, Ronald A., Brookline, MA, UNITED STATES
Chin, Lynda, Brookline, MA, UNITED STATES
PI US 2003003478 A1 20030102
AI US 2002-112503 A1 20020328 (10)
PRAI US 2001-279506P 20010328 (60)
DT Utility
FS APPLICATION
LN.CNT 1891
INCL INCLM: 435/006.000
INCL: 435/455.000
NCL NCLM: 435/006.000
NCL: 435/455.000
IC [7]
ICM: C12Q001-68
ICS: C12N015-85
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 65 OF 269 USPATFULL on STN
AN 2003:3056 USPATFULL
TI Directed in vitro differentiation of marrow stromal cells into neural cell progenitors
IN Prockop, Darwin J., New Orleans, LA, UNITED STATES
Deng, Weiwen, Metairie, LA, UNITED STATES
PI US 2003003090 A1 20030102
AI US 2002-153972 A1 20020523 (10)
PRAI US 2001-294281P 20010530 (60)
DT Utility
FS APPLICATION
LN.CNT 744
INCL INCLM: 424/093.210
INCL: 435/368.000
NCL NCLM: 424/093.210
NCL: 435/368.000
IC [7]
ICM: A61K048-00

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 66 OF 269 USPATFULL on STN
AN 2003:332339 USPATFULL
TI cDNA libraries reflecting gene expression during growth and
differentiation of human pluripotent stem cells
IN Funk, Walter D., Hayward, CA, United States
Carpenter, Melissa K., Foster City, CA, United States
Gold, Joseph D., San Francisco, CA, United States
Inokuma, Margaret S., San Jose, CA, United States
Xu, Chunhui, Cupertino, CA, United States
PA Geron Corporation, Menlo Park, CA, United States (U.S. corporation)
PI US 6667176 B1 20031223
AI US 2000-688031 20001010 (9)
PRAI US 2000-220064P 20000721 (60)
US 2000-216387P 20000707 (60)
US 2000-213739P 20000622 (60)
US 2000-213740P 20000622 (60)
US 2000-175581P 20000111 (60)
DT Utility
FS GRANTED
LN.CNT 2543
INCL INCLM: 435/363.000
INCLS: 435/366.000; 435/377.000; 435/320.100; 536/023.100
NCL NCLM: 435/363.000
NCLS: 435/320.100; 435/366.000; 435/377.000; 536/023.100
IC [7]
ICM: C12N005-06
EXF 435/6; 435/320.1; 435/325; 435/455; 435/363; 435/366; 435/377; 536/23.1
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 67 OF 269 USPATFULL on STN
AN 2003:321559 USPATFULL
TI Modified protein derived from protein kinase N
IN Kaibuchi, Kozo, Ikoma, JAPAN
Ono, Yoshitaka, Toyonaka, JAPAN
Iwamatsu, Akihiro, Yokohama, JAPAN
PA Kirin Beer Kabushiki Kaisha, Tokyo-To, JAPAN (non-U.S. corporation)
PI US 6660837 B1 20031209
AI US 1996-685852 19960724 (8)
PRAI JP 1995-262552 19950914
JP 1995-344606 19951205
JP 1996-80549 19960308
JP 1996-114226 19960411
DT Utility
FS GRANTED
LN.CNT 3868
INCL INCLM: 530/350.000
INCLS: 530/300.000; 514/002.000; 514/012.000; 435/194.000; 435/320.100;
435/252.300; 435/252.330; 435/325.000; 536/023.100; 536/023.200;
536/023.500
NCL NCLM: 530/350.000
NCLS: 435/194.000; 435/252.300; 435/252.330; 435/320.100; 435/325.000;
530/300.000; 536/023.100; 536/023.200; 536/023.500
IC [7]
ICM: C07K014-00
ICS: C12N009-12
EXF 435/194; 435/320.1; 435/252.3; 435/252.33; 435/325; 536/23.1; 536/23.2;
536/23.5; 530/300; 530/350; 514/2; 514/12
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 68 OF 269 USPATFULL on STN
AN 2003:285185 USPATFULL
TI Isolated mammalian neural stem cells, methods of making such cells
IN Steindler, Dennis A., Memphis, TN, United States
Laywell, Eric D., Memphis, TN, United States
Kukekou, Valery G., Memphis, TN, United States
Thomas, L. Brannon, Johnson City, TN, United States
PA University of Tennessee Research Foundation, United States (U.S.
corporation)
PI US 6638763 B1 20031028
WO 9830678 19980716
AI US 1999-402227 19991001 (9)
WO 1998-US366 19980107
PRAI US 1997-34910P 19970107 (60)

FS GRANTED
LN.CNT 974
INCL INCLM: 435/368.000
INCLS: 435/377.000; 435/384.000; 435/325.000
NCL NCLM: 435/368.000
NCLS: 435/325.000; 435/377.000; 435/384.000
IC [7]
ICM: C12N005-08
EXF 435/325; 435/377; 435/378; 435/379; 435/383; 435/384; 435/395; 435/402;
435/368

L5 ANSWER 69 OF 269 USPATFULL on STN
AN 2003:228269 USPATFULL
TI Low oxygen culturing of central nervous system progenitor cells
IN Csete, Marie, Ann Arbor, MI, United States
Doyle, John, South Pasadena, CA, United States
Wold, Barbara J., San Marino, CA, United States
McKay, Ron, Bethesda, MD, United States
Studer, Lorenz, New York, NY, United States
PA California Institute of Technology, Pasadena, CA, United States (U.S.
corporation)
National Institutes of Health, Bethesda, MD, United States (U.S.
corporation)
PI US 6610540 B1 20030826
AI US 1999-425462 19991022 (9)
RLI Continuation-in-part of Ser. No. US 1998-195569, filed on 18 Nov 1998,
now patented, Pat. No. US 6184035
DT Utility
FS GRANTED
LN.CNT 2398
INCL INCLM: 435/375.000
INCLS: 435/004.000; 435/325.000; 435/377.000; 435/352.000; 435/368.000
NCL NCLM: 435/375.000
NCLS: 435/004.000; 435/325.000; 435/352.000; 435/368.000; 435/377.000
IC [7]
ICM: C12N005-00
ICS: C12N005-02; C12N005-06; C12N005-08
EXF 435/4; 435/325; 435/352; 435/366; 435/368; 435/375; 435/377; 435/363;
435/383; 530/350; 530/300
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 70 OF 269 USPATFULL on STN
AN 2003:129825 USPATFULL
TI Differentiation of human embryonic germ cells
IN Gearhart, John D., Baltimore, MD, United States
Shamblott, Michael Joseph, Baltimore, MD, United States
PA The Johns Hopkins University School of Medicine, Baltimore, MD, United
States (U.S. corporation)
PI US 6562619 B1 20030513
AI US 2000-553640 20000420 (9)
RLI Continuation of Ser. No. US 1998-52772, filed on 31 Mar 1998, now
patented, Pat. No. US 6245566 Continuation-in-part of Ser. No. US
1997-989744, filed on 12 Dec 1997, now patented, Pat. No. US 6331406
Continuation-in-part of Ser. No. US 1997-829372, filed on 31 Mar 1997,
now patented, Pat. No. US 6090622
DT Utility
FS GRANTED
LN.CNT 1983
INCL INCLM: 435/366.000
INCLS: 435/325.000; 424/093.210
NCL NCLM: 435/366.000
NCLS: 424/093.210; 435/325.000
IC [7]
ICM: C12N005-08
EXF 435/325; 435/366; 435/440; 435/455; 800/8
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 71 OF 269 USPATFULL on STN
AN 2003:89280 USPATFULL
TI Method of isolating ependymal neural stem cells
IN Frisen, Jonas, Stockholm, SWEDEN
Janson, Ann Marie, Stockholm, SWEDEN
Johansson, Clas, Stockholm, SWEDEN
Momma, Stefan, Spangnga, SWEDEN
Clarke, Diana, Stockholm, SWEDEN

Lendahl, Urban, Sundbyberg, SWEDEN
 Delfani, Kioumars, Solna, SWEDEN
 PA Neuronova AB, Stockholm, SWEDEN (non-U.S. corporation)
 PI US 6541247 B1 20030401
 AI US 1998-104772 19980625 (9)
 DT Utility
 FS GRANTED
 LN.CNT 1146
 INCL INCLM: 435/325.000
 INCLS: 435/007.100; 435/007.200; 435/007.210; 435/353.000; 435/354.000;
 435/366.000; 435/368.000
 NCL NCLM: 435/325.000
 NCLS: 435/007.100; 435/007.200; 435/007.210; 435/353.000; 435/354.000;
 435/366.000; 435/368.000
 IC [7]
 ICM: C12N005-00
 ICS: C12N005-02; C12N005-06; G01N033-53; G01N033-567
 EXF 435/325; 435/352; 435/353; 435/354; 435/366; 435/368; 435/455; 435/7.1;
 435/7.2

 L5 ANSWER 72 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 DUPLICATE 16
 AN 2003:400731 BIOSIS
 DN PREV200300400731
 TI Aberrant growth and differentiation of oligodendrocyte progenitors in
 neurofibromatosis type 1 mutants.
 AU Bennett, Michael R.; Rizvi, Tilat A.; Karyala, Saikumar; McKinnon, Randall
 D.; Ratner, Nancy [Reprint Author]
 CS Department of Cell Biology, Neurobiology, and Anatomy, College of
 Medicine, University of Cincinnati, 3125 Eden Avenue, Cincinnati, OH,
 45267-0521, USA
 nancy.ratner@uc.edu
 SO Journal of Neuroscience, (August 6 2003) Vol. 23, No. 18, pp. 7207-7217.
 print.
 ISSN: 0270-6474 (ISSN print).
 DT Article
 LA English
 ED Entered STN: 3 Sep 2003
 Last Updated on STN: 3 Sep 2003

 L5 ANSWER 73 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 DUPLICATE 17
 AN 2003:287630 BIOSIS
 DN PREV200300287630
 TI Differentiation of monkey embryonic stem cells into neural lineages.
 AU Kuo, Hung-Chih; Pau, K.-Y. Francis; Yeoman, Richard R.; Mitalipov,
 Shoukhrat M.; Okano, Hideyuki; Wolf, Don P. [Reprint Author]
 CS Oregon National Primate Research Center, 505 NW 185th Avenue, Beaverton,
 OR, 97006, USA
 wolfd@ohsu.edu
 SO Biology of Reproduction, (May 2003) Vol. 68, No. 5, pp. 1727-1735. print.
 CODEN: BIREBV. ISSN: 0006-3363.
 DT Article
 LA English
 ED Entered STN: 19 Jun 2003
 Last Updated on STN: 19 Jun 2003

 L5 ANSWER 74 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 DUPLICATE 18
 AN 2003:119580 BIOSIS
 DN PREV200300119580
 TI Locally born olfactory bulb stem cells proliferate in response to
 insulin-related factors and require endogenous insulin-like growth
 factor-I for differentiation into neurons and glia.
 AU Vicario-Abejon, Carlos [Reprint Author]; Yusta-Boyo, Maria J.;
 Fernandez-Moreno, Carmen; de Pablo, Flora
 CS Centro de Investigaciones Biologicas, CSIC, Velazquez 144, E-28006,
 Madrid, Spain
 cvicario@cib.csic.es
 SO Journal of Neuroscience, (February 1 2003) Vol. 23, No. 3, pp. 895-906.
 print.
 ISSN: 0270-6474 (ISSN print).
 DT Article
 LA English
 ED Entered STN: 5 Mar 2003

L5 ANSWER 75 OF 269 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:211630 CAPLUS
 DN 138:396613
 TI Neurotrophins facilitate neuronal differentiation of cultured neural stem cells via induction of mRNA expression of basic helix-loop-helix transcription factors Mash1 and Math1
 AU Ito, Hisanori; Nakajima, Aki; Nomoto, Hiroshi; Furukawa, Shoei
 CS Laboratory of Molecular Biology, Gifu Pharmaceutical University, Gifu, 502-8585, Japan
 SO Journal of Neuroscience Research (2003), 71(5), 648-658
 CODEN: JNREDK; ISSN: 0360-4012
 PB Wiley-Liss, Inc.
 DT Journal
 LA English
 RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 76 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2003:532692 BIOSIS
 DN PREV200300535744
 TI Tales of transdifferentiation.
 AU Jin, Kunlin; Greenberg, David A. [Reprint Author]
 CS Buck Institute for Age Research, 8001 Redwood Boulevard, Novato, CA, 94945, USA
 dggreenberg@buckinstitute.org
 SO Experimental Neurology, (October 2003) vol. 183, No. 2, pp. 255-257.
 print.
 CODEN: EXNEAC. ISSN: 0014-4886.
 DT Article
 LA English
 ED Entered STN: 12 Nov 2003
 Last Updated on STN: 12 Nov 2003

L5 ANSWER 77 OF 269 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:415190 CAPLUS
 DN 139:212169
 TI Inhibition of endogenous VEGF impedes revascularization and astroglial proliferation: roles for VEGF in brain repair
 AU Krum, Janette M.; Khaibullina, Alfia
 CS Department of Anatomy and Cell Biology, George Washington University Medical Center, Washington, DC, 20037, USA
 SO Experimental Neurology (2003), 181(2), 241-257
 CODEN: EXNEAC; ISSN: 0014-4886
 PB Elsevier Science
 DT Journal
 LA English
 RE.CNT 93 THERE ARE 93 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 78 OF 269 MEDLINE on STN
 AN 2003137180 MEDLINE
 DN PubMed ID: 12652649
 TI ****EGF**** -responsive rat neural stem cells: molecular follow-up of neuron and astrocyte differentiation in vitro.
 AU Jori F P; Galderisi U; Piegari E; Cipollaro M; Cascino A; Peluso G; Cotrufo R; Giordano A; Melone M A B
 CS Department of Neurological Sciences, Second University of Naples, Naples, Italy.
 SO Journal of cellular physiology, (2003 May) 195 (2) 220-33.
 Journal code: 0050222. ISSN: 0021-9541.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 200305
 ED Entered STN: 20030325
 Last Updated on STN: 20030531
 Entered Medline: 20030530

L5 ANSWER 79 OF 269 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:973646 CAPLUS
 TI Effects of T3 on differentiation of human neural stem cells to oligodendrocyte
 AU Liu. Ben; Li. Yanvina; Liu. Chunrong; Pana. Zhilina

SO Peop. Rep. China
 Jiepou Xuebao (2003), 34(2), 213-216
 CODEN: CPHPA5; ISSN: 0529-1356
 PB Jiepou Xuebao Bianji Weiyuanhui
 DT Journal
 LA Chinese

L5 ANSWER 80 OF 269 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:673295 CAPLUS
 DN 139:302699
 TI Generation of cloned calves and transgenic chimeric embryos from bovine embryonic stem-like cells
 AU Saito, Shigeo; Sawai, Ken; Ugai, Hideyo; Moriyasu, Satoru; Minamihashi, Akira; Yamamoto, Yusuke; Hirayama, Hiroki; Kageyama, Soichi; Pan, Jianzhi; Murata, Takehide; Kobayashi, Yoshiro; Obata, Yuichi; Yokoyama, Kazunari K.
 CS Saito Laboratory of Cell Technology, Yaita, Tochigi, 329-1571, Japan
 SO Biochemical and Biophysical Research Communications (2003), 309(1), 104-113
 CODEN: BBRCA9; ISSN: 0006-291X
 PB Elsevier Science
 DT Journal
 LA English

RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 81 OF 269 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2003:463607 CAPLUS
 DN 139:208169
 TI Effect of cytokines on proliferation and differentiation of neural stem cells
 AU Zhang, Wenzhi; Su, Xin; Qin, Jinxi; Kong, Fanming; Kong, Jianguo; Wang, Xinpeng; Zhi, Dashi
 CS Department of Pathology, Tianjin Huanhu Hospital, Tianjin, 300060, Peop. Rep. China
 SO Linchuang Yu Shiyan Binglixue Zazhi (2003), 19(1), 77-81
 CODEN: LYSBAA; ISSN: 1001-7399
 PB Linchuang Yu Shiyan Binglixue Zazhi Bianjibu
 DT Journal
 LA Chinese

L5 ANSWER 82 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2003:528897 BIOSIS
 DN PREV200300524702
 TI ISOLATION, CHARACTERIZATION AND EXPANSION OF PORCINE RETINAL PROGENITOR CELLS.
 AU Shatos, M. A. [Reprint Author]; Klassen, H.; Scherfig, E.; Kiilgaard, J. F.; Warfvinge, K.; Prause, J. U.; Young, M. J. [Reprint Author]
 CS Schepens Eye Research Institute, Boston, MA, USA
 SO ARVO Annual Meeting Abstract Search and Program Planner, (2003) Vol. 2003, pp. Abstract No. 1694. cd-rom.
 Meeting Info.: Annual Meeting of the Association for Research in Vision and Ophthalmology. Fort Lauderdale, FL, USA. May 04-08, 2003. Association for Research in Vision and Ophthalmology.
 DT Conference; (Meeting)
 Conference; (Meeting Poster)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 12 Nov 2003
 Last Updated on STN: 12 Nov 2003

L5 ANSWER 83 OF 269 TOXCENTER COPYRIGHT 2004 ACS on STN
 AN 2004:19730 TOXCENTER
 DN DART-TER-3001508
 TI Analysis of mouse cytomegalovirus susceptibility in brain slices.
 AU Kawasaki H; Kosugi I; Baba S; Tsuchida T; Li R Y; Arai Y; Furuta K; Ishiwata M; Tsutsui Y
 CS 2nd Department of Pathology, Hamamatsu University School of Medicine, Shizuoka, Japan.
 SO Congenit Anom Kyoto, (2002 Sep) 42 (3) 246.
 ISSN: 0914-3505.
 DT Abstract; (MEETING ABSTRACT)
 FS DART
 LA English
 ED Entered STN: 20040203
 Last Updated on STN: 20040203

L5 ANSWER 84 OF 269 TOXCENTER COPYRIGHT 2004 ACS on STN
 AN 2004:19687 TOXCENTER
 DN DART-TER-3001465
 TI Mechanisms of developing brain disorders induced by cytomegalovirus.
 AU Tsutsui Y
 CS Second Department of Pathology, Hamamatsu University School of Medicine,
 Hamamatsu, Shizuoka, Japan.
 SO Congenit Anom Kyoto, (2002 Sep) 42 (3) 228-30.
 ISSN: 0914-3505.
 DT Abstract; (MEETING ABSTRACT)
 FS DART
 LA English
 ED Entered STN: 20040203
 Last Updated on STN: 20040203

L5 ANSWER 85 OF 269 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
 AN 2002-14142 BIOTECHDS
 TI Cellular composition useful for transplantation purposes, comprises a
 population of multipotent mammalian cells that are self-renewing, and
 capable of forming non-adherent clusters in culture;
 genetically modified stem cell differentiation and epithelium tissue
 culture for disease therapy and tissue engineering
 AU TOMA J; AKHAVAN M; FERNANDES K J L; FORTIER M; MILLER F
 PA TOMA J; AKHAVAN M; FERNANDES K J L; FORTIER M; MILLER F
 PI US 2002016002 7 Feb 2002
 AI US 2000-916639 24 Jan 2000
 PRAI US 2001-916639 26 Jul 2001
 DT Patent
 LA English
 OS WPI: 2002-239226 [29]

L5 ANSWER 86 OF 269 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 20
 AN 2002:674692 CAPLUS
 DN 137:181930
 TI Multipotent stem cells from peripheral tissues and uses thereof
 IN Toma, Jean; Akhavan, Mahnaz; Fernandes, Karl J. L.; Fortier, Mathieu;
 Miller, Freda
 PA Can.
 SO U.S. Pat. Appl. Publ., 48 pp., Cont.-in-part of U.S. Ser. No. 916,639.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002123143	A1	20020905	US 2001-991480	20011109
	WO 2001053461	A1	20010726	WO 2001-CA47	20010124
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				
	CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,				
	HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,				
	LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,				
	SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,				
	YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,				
	DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,				
	BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 2002016002	A1	20020207	US 2001-916639	20010726
	US 2003003574	A1	20030102	US 2002-99539	20020315
	WO 2003010243	A2	20030206	WO 2002-CA1130	20020726
	WO 2003010243	A3	20030731		
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				
	CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				
	GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				
	LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,				
	PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,				
	UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,				
	TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,				
	CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,				
	PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,				
	NE, SN, TD, TG				
PRAI	US 1997-920272	A2	19970822		
	US 2000-490422	B2	20000124		
	US 2000-670049	A2	20000925		
	WO 2001-CA47	A2	20010124		

US 2001-991480 A2 20011109
US 2002-99539 A 20020315

L5 ANSWER 87 OF 269 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 21
AN 10221084 IFIPAT;IFIUDB;IFICDB
TI PRIMITIVE NEURAL STEM CELLS AND METHOD FOR DIFFERENTIATION OF STEM CELLS
TO NEURAL CELLS
IN Tropepe Vincent; Van Der Kooy Derek (CA)
PA Unassigned Or Assigned To Individual (68000)
PI US 2002164791 A1 20021107
AI US 2001-966768 20010928
PRAI US 2000-236394P 20000929 (Provisional)
FI US 2002164791 20021107
DT Utility; Patent Application - First Publication
FS CHEMICAL
APPLICATION

CLMN 46

GI 20 Figure(s).

FIG. 1A is a graph showing the neural sphere colony forming ability of embryonic stem (ES) cells cultured at 20 cells/ul in chemically defined serum free media in the presence of various cytokines and growth factors and combinations thereof. The inset shows a light microscope photograph of an ES cell derived neural colony after 7 days in culture.

FIG. 1B is a graph showing limiting dilution analysis of the frequency of neural sphere colony formation from ES cells in the presence of LIF.

FIG. 1C shows inverted fluorescence microscope photographs of differentiated ES-cell derived sphere colonies, immunocytochemically labelled for the neural precursor marker ***nestin*** after 3 or 7 days in vitro.

FIG. 1D is a graph showing the secondary, tertiary and quaternary neural stem cell colony forming ability of cells dissociated from primary neural colonies and cultured in the presence of exogenous LIF, FGF2 and B27.

FIG. 2A shows inverted fluorescence microscope photographs of differentiated ES cell-derived sphere colonies, immunocytochemically labelled for neural cell-specific genes NAP2 (neurons), ***GFAP*** (astrocytes and 04 (oligodendrocytes)).

FIG. 2B shows RT-PCR analysis of neural and non-neural lineage gene expression in RNA extracted from primary ES cells (R1), ES cell-derived sphere colonies (SC), and positive control tissue samples (+). Listed are the Emx2, HoxB1, Six3 and Otx1 markers for neural differentiation. Brachyury marker for mesoderm differentiation, GATA4 and HNF4 markers for endoderm differentiation, and CK-17 for epidermal differentiation.

FIG. 3A is a graph showing the neural colony forming ability of ES cells with a homozygous null mutation (FGFR-1(-/-)) in the gene encoding ***FGF*** -receptor-1, or control heterozygous ES cells (FGFR-1(+/-)).

FIG. 3B is a graph showing the neural colony forming ability of ES cells cultured in the presence of anti-FGF2 antibodies.

FIG. 3C is a graph showing the neural colony forming ability of neural stem cells isolated from the day E9.5 forebrain and cultured in the presence of LIF and FGF2.

FIG. 4A is a graph showing the neural colony forming ability of ES cells cultured in the presence of LIF and FGF2 alone or in the presence of BMP4.

FIG. 4B is a graph showing the neural colony forming ability of ES cells cultured in the presence of LIF and FGF2 alone or in the presence of LIF and FGF2 and the BMP protein antagonist Noggin.

FIG. 4C is a graph showing the neural colony forming ability of Smad4(-/-) and wildtype E14K ES cells.

FIG. 4D is a graph showing the neural colony forming ability of ES cells cultured in the presence of LIF alone or in the presence of LIF and exogenous mouse Cerberus-like (mCer-1) protein.

FIG. 5A is a table showing the proportion of ES cells cultured at low cell density that were immunoreactive for the neural precursor marker ***nestin***, the immature neuronal marker beta III-tubulin, the marker NeuN, and ICM/ES cell nuclear marker Oct-4. The photographs at left shows ES cells immunocytochemically labelled for ***nestin***, beta III-tubulin, NeuN, and Oct-4

FIG. 5B is a graph showing the proportion of either Smad4(-/-) or control E14K wildtype ES cells immunoreactive for the immature neuronal marker beta III-tubulin. The photograph at left shows Smad4(-/-) ES cells immunocytochemically labelled for beta II-tubulin.

FIG. 6A shows an ultraviolet light microscope photograph of a chimeric day E9.5 mouse embryo generated using ES cell-derived neural colonies harbouring a yellow fluorescent protein transgene and a CD1 host morula. The inset shows a normally developed blastocyst after 24 hours in vitro

colony and a CD1 host morula.

FIG. 6B shows a light microscope photograph of a mouse blastocyst (arrow) and an unintegrated day E9.5 telencephalon-derived sphere colony expressing green fluorescent protein, 24 hours after the attempted aggregation of the two.

FIG. 6C shows a light microscope photograph of the mouse embryo (arrow) developed from the blastocyst shown in FIG. 6B.

FIGS. 7A-D are photographs of well-circumscribed clusters of cells. FIGS. 7A and B depict cells which do not express ***nestin*** (arrow in A and B) that resemble typical undifferentiated ES cell colonies. These aggregated cells express the undifferentiated ES cell-specific marker SSEA-1 (arrowheads in C and D). Moreover, the relatively large cells that resemble ***nestin*** positive cells do not express SSEA-1 (arrow in C and D).

FIG. 7E is a diagram showing a model of the establishment of the early neural cell lineage from ES cells.

L5 ANSWER 88 OF 269 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 22
AN 10220601 IFIPAT;IFIUDB;IFICDB
TI EMBRYONIC STEM CELLS AND NEURAL PROGENITOR CELLS DERIVED THEREFROM
IN Ben-Hur Tamir (IL); Pera Martin Frederick (AU); Reubinoff Benjamin Eithan (IL)
PA Unassigned Or Assigned To Individual (68000)
PI US 2002164308 A1 20021107
AI US 2001-970543 20011004
RLI US 2001-808382 20010314 CONTINUATION-IN-PART PENDING
PRAI AU 2000-6211 20000314
AU 2000-1279 20001106
AU 2001-2920 20010206
FI US 2002164308 20021107
DT Utility; Patent Application - First Publication
FS CHEMICAL
APPLICATION
CLMN 73
GI 38 Figure(s).

FIG. 1 shows phase contrast micrographs of ES cells and their differentiated progeny. A, inner cell mass three days after plating. B, colony of ES cells. C, higher magnification of an area of an ES cell colony. D, an area of an ES cell colony undergoing spontaneous differentiation during routine passage. E, a colony four days after plating in the absence of a feeder cell layer but in the presence of 2000 units/ml human LIF undergoing differentiation in its periphery. F, neuronal cells in a high density culture. Scale bars: A and C, 25 microns; B and E, 100 microns; D and F, 50 microns.

FIG. 2 shows marker expression in ES cells and their differentiated somatic progeny. A, ES cell colony showing histochemical staining for alkaline phosphatase. B, ES cell colony stained with antibody MC-813-70 recognising the SSEA-4 epitope. C, ES cell colony stained with antibody TRAL-60. D, ES cell colony stained with antibody GCTM-2. E, high density culture, cell body and processes of a cell stained with antineurofilament 68 kDa protein. F, high density culture, cluster of cells and network of processes emanating from them stained with antibody against neural cell adhesion molecule. G, high density culture, cells showing cytoplasmic filaments stained with antibody to muscle actin. H, high density culture, cell showing cytoplasmic filaments stained with antibody to desmin. Scale bars: A, 100 microns; B-D, and F, 200 microns; E, G and H, 50 microns.

FIG. 3 shows RT-PCR analysis of gene expression in ES cells and their differentiated derivatives. All panels show 1.5% agarose gels stained with ethidium bromide. A, expression of Oct-4 and b-actin in ES stem cells and high density cultures. Lane 1, 100 bpDNA ladder. Lane 2, stem cell culture, b-actin. Lane 3, stem cell culture, Oct-4. Lane 4, stem cell culture, PCR for Oct-4 carried out with omission of reverse transcriptase. Lane 5, high density culture, b-actin. Lane 6, high density culture, Oct-4. Lane 7, high density culture, PCR for Oct-4 carried out with omission of reverse transcriptase. b-actin band is 200 bp and Oct-4 band is 320 bp. B, expression of ***nestin*** and Pax-6 in neural progenitor cells that were derived from differentiating ES colonies. Left lane, 100 bp DNA ladder; lane 1, b-actin in HX 142 neuroblastoma cell line (positive control for ***nestin*** PCR); lane 2, b-actin in neural progenitor cells; lane 3, ***nestin*** in HX 142 neuroblastoma cell line; lane 4, ***nestin*** in neural progenitor cells; lane 5, ***nestin*** PCR on same sample as lane 4 without addition of reverse transcriptase; lane 6, Pax-6; lane 7, Pax-6 PCR on same sample as line 6 without addition of reverse transcriptase. ***Nestin*** band is 208 bp. Pax-6 is 274 bp. C. expression of glutamic

lane 1, b-actin; lane 2, b-actin PCR on same sample as lane 1 without addition of reverse transcriptase; lane 3, glutamic acid decarboxylase; lane 4 glutamic acid decarboxylase on same sample as lane 3 without addition of reverse transcriptase. Glutamic acid decarboxylase band is 284 bp. D, expression of GABA A alpha 2 receptor. Left lane, 100 bp DNA ladder; lane 1, b-actin; lane 2, GABA A alpha 2 receptor; lane 3, PCR without addition of reverse transcriptase. GABA A alpha 2 receptor subunit band is 471 bp.

FIG. 4 shows histology of differentiated elements found in teratomas formed in the testis of SCID mice following inoculation of HES-1 or HES-2 colonies. A, cartilage and squamous epithelium, HES-2. B, neural rosettes, HES-2. C, ganglion, gland and striated muscle, HES-1. D, bone and cartilage, HES-1. E, glandular epithelium, HES-1. F, ciliated columnar epithelium, HES-1. Scale bars: A-E, 100 microns; F, 50 microns.

FIG. 5 shows phase contrast microscopy and immunochemical analysis of marker expression in neural progenitor cells isolated from differentiating ES cultures. A, phase contrast image of a sphere formed in serum-free medium. B-D, indirect immunofluorescence staining of spheres, 4 hours after plating on adhesive substrate, for N-CAM, ***nestin***, and vimentin respectively. In C and D, cells at the base of the sphere were placed in plane of focus to illustrate filamentous staining; confocal examination revealed that cells throughout the sphere were decorated by both antibodies. Scale bar is 100 microns in all panels.

FIG. 6 shows phase contrast appearance and marker expression in cultures of neurons derived from progenitor cells shown in FIG. 5. A, phase contrast micrograph of differentiated cells emanating from a sphere plated onto adhesive surface. B-H, indirect immunofluorescence microscopy of differentiated cells decorated with antibodies against 200 kDa neurofilament protein (B), 160 kDa neurofilament protein (C), MAP2a+b (D), glutamate (E), synaptophysin (F), glutamic acid decarboxylase (G) and beta-tubulin (H). Scale bars: A, ;B, 100 microns; C, 200microns; D, 20 microns; E and F, 10 microns; G, 20 microns; H, 25 microns.

FIG. 7 shows neural precursors proliferating as a monolayer on a plastic tissue culture dish in the presence of ***EGF*** and bFGF. These monolayer cultures of proliferating cells were obtained after prolonged cultivation (2-3 weeks) of the spheres in the presence of growth factors without sub-culturing.

FIG. 8 shows phase contrast appearance of a culture consisting of differentiated neural cells.

FIG. 9 shows phase contrast appearance of a sphere that is formed 72 hours after the transfer of a clump of undifferentiated ES cells into serum free medium (Scale bar 100 microns).

FIG. 10 shows linear correlation between the volume of spheres and the number of progenitor cells within a sphere. Spheres of various diameters that were generated from differentiating ES colonies and were propagated for 14-15 weeks were disaggregated into single cell suspension and the number of cells per sphere was counted.

FIG. 11 shows indirect immunofluorescence staining of a sphere, 4 hours after plating on adhesive substrate, for N-CAM. The sphere was generated by direct transfer of undifferentiated ES cells into serum free medium and propagation of the resulting spheres for 5 passages. (Scale bar 100 microns).

FIG. 12 shows indirect immunofluorescence membraneous staining for N-CAM of single cells at the periphery of a sphere 4 hours after plating on adhesive substrate. The sphere was generated by direct transfer of undifferentiated ES cells into serum free medium and propagation of the resulting spheres for 5 passages. (Scale bar 25 microns).

FIG. 13 shows indirect immunofluorescence staining of a spheres 4 hours after plating on adhesive substrate for the intermediate filament ***nestin***. Cells at the base of the sphere were placed in plane of focus to illustrate filamentous staining. The sphere was generated by direct transfer of undifferentiated ES cells into serum free medium and propagation of resulting spheres for 5 passages. (Scale bar 25 microns).

FIG. 14 shows indirect immunofluorescence microscopy of a differentiated cell decorated with antibodies against the oligodendrocyte progenitor marker O4. (Scale bar 12.5 microns).

FIG. 15 shows indirect immunofluorescence staining of a sphere 4 hours after plating on adhesive substrate for the intermediate filament vimentin. Cells at the base of the sphere were placed in plane of focus to illustrate filamentous staining. The sphere was generated by direct transfer of undifferentiated ES cells into serum free medium and propagation of resulting spheres for 7 passages. (Scale bar 25 microns).

FIG. 16 shows the growth pattern of spheres that were generated directly from undifferentiated ES cells. Each bar represents the mean (+SD)

after derivation. A more excessive growth rate is evident during the first 5 weeks.

FIG. 17 shows persistent growth in the volume of spheres along time. Each bar represents the mean (\pm SD) increment in volume per week of 24 spheres at nine to twenty one weeks after derivation. The spheres were generated from differentiating ES colonies.

FIG. 18 shows linear correlation between the volume of spheres and the number of progenitor cells within a sphere. Spheres of various diameters, that were generated directly from undifferentiated ES cells and were propagated 5-7 weeks, were disaggregated into single cell suspension and the number of cells per sphere was counted.

FIG. 19 shows RT-PCR analysis of gene expression in ES cells (a week after passage) and neural spheres derived from differentiating colonies and directly from undifferentiated ES cell. All panels show 2% agarose gels stained with ethidium bromide. Lanes 1, 2 and 3, Oct-4 in ES cell culture, neural spheres derived from differentiating colonies, neural spheres derived from undifferentiated ES cells. Lane 4, stem cell culture, PCR for Oct-4 carried out with omission of reverse transcriptase. Lanes 5, 6, and 7, *****nestin***** in ES cell culture, neural spheres derived from differentiating colonies, neural spheres derived from undifferentiated ES cells. Lane 8, stem cell culture, PCR for *****nestin***** carried out with omission of reverse transcriptase. Lanes 9, 10 and 11, Pax-6 in ES cell culture, neural spheres derived from differentiating colonies, neural spheres derived from undifferentiated ES cells. Lane 12, stem cell culture, PCR for Pax-6 carried out with omission of reverse transcriptase. Lane 13, 100 bp DNA ladder. Oct-4 band is 320 bp, *****nestin***** is 208 bp and Pax-6 is 274 bp.

FIG. 20 shows indirect immunofluorescence microscopy of differentiated astrocyte cells decorated with antibody against *****GFAP*****. (Scale bar 25 microns).

FIG. 21 shows indirect immunofluorescence microscopy of brain sections of two mice (A and B) 4 weeks after transplantation of human neural precursors prelabeled with BrDU. Cells with a nucleus decorated with anti BrDU (brown stain, black arrow) are evident near the ventricular surface (white arrow indicate mouse unstained nuclei, bar=20 microns).

FIG. 22 shows indirect immunofluorescence microscopy of brain sections of a mice 4 weeks after transplantation of human neural precursors prelabeled with BrDU. Wide spread distribution of transplanted human cells decorated by anti BrDU antibodies is evident in the periventricular areas. The periventricular area in A is demonstrated at a higher magnification in B and C. (Bars=150, 60 and 30 microns in A, B and C).

FIG. 23 shows indirect immunocytochemical microscopy of brain sections of a mice 4 weeks after transplantation of human neural precursors prelabeled with BrDU. The transplanted human cells are migrating along the rostral migratory stream (bar=150 microns).

FIG. 24 shows RT-PCR analysis of gene expression in neural spheres derived from differentiating (A) and undifferentiated (B) ES cells. All panels show 2% agarose gels stained with ethidium bromide. Lanes 1 and 10, 100 bpDNA ladder; Lane 2, CD34; Lane 3, Flk-1; lane4, HNF-3; lane 5, alfafetoprotein. Lanes 6-9 PCR reaction on the same samples as lanes 2-5 carried out with the omission of reverse transcriptase. CD-34 band is 200 bp, Flk-1 is 199, HNF-3 is 390, AFP is 340 bp.

FIG. 25 shows by RT-PCR analysis the expression of *****GFAP***** and the pip gene in differentiated cells from neural spheres derived from differentiating ES cell colonies. The expression of *****GFAP***** indicates differentiation into astrocytes while the presence of both dm-20 and pip transcripts indicate that differentiation into oligodendrocyte cells has occurred. Lanes 2, 4, 6 and lanes 3, 5, 7 are from two separate RNA samples from differentiated spheres that were independently derived from ES cells. Lane 1 and 8, 100 bp DNA ladder; Lanes 2 and 4, *****GFAP*****; lanes 3 and 5, plp and dm-20; lanes 6 and 7, PCR reaction on the same samples as lanes 3 and 5 carried out with the omission of reverse transcriptase. *****GFAP***** band is 383, pip band is 354 bp and dm-20 is 249 bp.

FIG. 26 shows a dark field stereomicroscopic photograph of areas (arrows) destined to give rise to neural precursors in a differentiating ES cell colony 3 weeks after passage (bar=1.6 mm).

FIG. 27 shows indirect immunochemical analysis of marker expression in cultures of neurons derived from progenitor cells that were derived directly from undifferentiated ES cells: A, indirect immunofluorescence microscopy of neurites decorated with antibody against 160 kDa neurofilament protein. B and C, indirect immunofluorescence staining of differentiated cells for MAP2a+b and beta-tubulin III. Scale bars: A 100 microns, B and C 10 microns.

FIG. 28 shows indirect immunochemical analysis of the expression of

decorated with antibodies against tyrosine hydroxylase. Scale bars: 30 microns.

FIG. 29 shows in vivo differentiation into astrocyte cells of transplanted human neural progenitors prelabeled with BrDU. Donor cells are identified by indirect immunochemical detection of BrDU (dark nuclei, arrows). Dual staining demonstrates donor cells decorated by anti *****GFAP***** (orange). Transplanted cells are migrating into the brain parenchyma (white arrow) and are also found in the periventricular zone (dark arrow) (A). A higher magnification of cells that have differentiated into astrocytes and migrated into the host brain (B).

FIG. 30 shows in vivo differentiation into oligodendrocyte cells of transplanted human neural progenitors prelabeled with BrDU. Donor cells are identified by indirect immunochemical detection of BrDU (dark nuclei, arrows). Dual staining demonstrates donor cells decorated by anti CNPase (orange).

FIG. 31 shows cumulative growth curve for human neural progenitors derived from differentiating colonies. (A) Continuous growth is evident during an 18-22 week period. The increment in the volume of the spheres was continuously monitored as an indirect measure of the increase in cell numbers. A linear positive correlation between the volume of the spheres and the number of cells within the spheres (B, insert) was maintained along cultivation. It supported the validity of monitoring the increment of sphere volume as an indirect indicator of cell proliferation.

FIG. 32 shows RT-PCR analysis of the expression of non-neural markers in human ES derived spheres. All panels show 2% agarose gels stained with ethidium bromide. The symbols + and - indicate whether the PCR reaction was performed with or without the addition of reverse transcriptase. A 1 Kb plus DNA ladder was used in all panels. beta-actin band is 291 bp, keratin is 780 bp, Flk-1 is 199 bp, CD34 is 200 bp, AC-133 is 200 bp, transferrin is 367 bp, amylase is 490 bp and alpha 1 anti trypsin is 360 bp.

FIG. 33 shows a phase contrast micrograph of differentiated cells growing out from a sphere 2 weeks after plating onto an adhesive surface and culture in the absence of growth factors. Scale bar is 200 μ m.

FIG. 34 shows RT-PCR analysis of the expression of neuronal and glial markers in differentiated cells originating from human ES derived neural spheres. All panels show 2% agarose gels stained with ethidium bromide. The symbols + and - indicate whether the PCR reaction was performed with or without the addition of reverse transcriptase. A 1 Kb plus DNA ladder was used in all panels. Plp and dm-20 bands are 354 bp and 249 bp respectively, MBP is 379 bp, *****GFAP***** is 383 bp, NSE is 254 bp and NF-M is 430 bp.

FIG. 35 shows indirect immunochemical analysis of the expression of serotonin (A) and GABA (B). Scale bars are 20 μ m.

FIG. 36 shows dissemination of transplanted BrDU+ human ES derived neural progenitor cells in the mouse host brain.

(A) At 2 days after transplantation most cells were found lining the ventricular wall. (B) After 4-6 weeks most cells had left the ventricles (V) and populated the corpus callosum (CC), fimbria (fim), internal capsule (i.c.). BrDU+ cells were not found in the striatum (str) or CA region of the hippocampus (hipp). (C) Chains of BrDU+ cells were found in the rostral migratory stream (RMS). (D) BrDU+ cells in the periventricular white matter. (E) Higher magnification of D, to show nuclear specific localization of BrDU.

FIG. 37 shows identification of the transplanted cells in the brain by human and neural-lineage specific markers. (A) A typical chain of transplanted cells in the corpus callosum, stained with human specific anti-mitochondrial antibody. The mitochondrial staining (green fluorescence) on Nomarsky background (blue, cell nuclei indicated by asterisk) shows a typical perinuclear localization. (B) Double staining for BrDU (green fluorescence) and human specific anti ribonuclear protein (red fluorescence) shows nuclear co-localization, indicating that BrDU+ cells were indeed of human origin. (C) A *****GFAP***** + astrocyte (red) from the periventricular region, co-labeled with BrDU (green), indicating its origin from the graft. (D) An NG2+ oligodendrocyte progenitor (red) in the periventricular region, co-labeled with BrDU (green). (E) A CNPase+ oligodendrocyte (red) in the corpus callosum, co-labeled with BrDU (immunohistochemistry, shown as dark nucleus in Nomarsky). (F) Neuronal processes in the fimbria, stained with a human specific anti-70 kDa neurofilament. (G) A beta III-tubulin+ neuron (green fluorescence) in the olfactory bulb, co-labeled with BrDU (as dark nucleus (arrow) in Nomarsky). Bars=10 μ m.!

IN FREEMAN THOMAS; JANSSEN WILLIAM; SANBERG PAUL; SANCHEZ-RAMOS JUAN; SONG
 SHIJIE
 PA Unassigned Or Assigned To Individual (68000)
 PPA South Florida, University of (Probable)
 PI US 2002146821 A1 20021010
 AI US 1999-307824 19990507
 PRAI US 1998-84533P 19980507 (Provisional)
 US 1998-112979P 19981217 (Provisional)
 US 1999-129684P 19990416 (Provisional)
 FI US 2002146821 20021010
 US 6528245 20030304
 DT Utility; Patent Application - First Publication
 FS CHEMICAL
 APPLICATION
 CLMN 20
 GI 8 Figure(s).

FIG. 1 is a bar graph. BMSC adherent to culture dishes were treated with ***EGF*** (10 ng/ml), RA (0.5 μ M) or RA plus BDNF (10 ng/ml) for 7 days. Each bar represents the mean number (+SEM) of fibronectin immunoreactive cells per visual field (20 x objective) determined in 20 fields per dish in 4 culture dishes. * = p less-than 0.05, two-tailed t-test FIGS. 2A through 2F are photomicrographs of BMSC from lacZ mice that have been cocultured with mouse fetal midbrain cells for 2 weeks in N5 medium supplemented with cis-9 retinoic acid (0.5 μ M) and BDNF (10 ng/ml).

FIGS. 3A through 3F are photomicrographs, which illustrate the migration and integration of BMSC into rat midbrain. FIG. 3A (scale bar=500 μ m) shows symmetrical distribution despite unilateral grafting into the striatum. FIG. 3B is a region of the paraventricular nucleus (scale bar=100 μ m). None of the beta-gal+ cells are labeled with the red-brown stain (TH-ir). FIGS. 3A (scale bar=500 μ m), 3B (scale bar=100 μ m) and 3C (scale bar=50 μ m) depict cells doubly stained for beta-gal and TH-ir. FIGS. 3D (scale bar=50 μ m) and 3E (scale bar=25 μ m) illustrate sections from the red nucleus that have doubly stained for beta-gal and NeuN-ir. FIG. 3F (scale bar=25 μ m) illustrates beta-gal+ cells from the red nucleus also doubly stained for MAP2-ir.

FIGS. 4A through 4F are photomicrographs of a section from rat cerebellar lobule illustrating laminar distribution of betagal+ cells in a distribution of Purkinje cells. alpha-gal+ are co-labeled with calbindin immunoreactivity in FIGS. 4A, 4B, and 4C. (scale bar=100 μ m in 4A, 50 μ m in 4B and 25 μ m in 4C). FIG. 4D shows beta-gal+ Purkinje cells co-labeled with GAD-ir (scale bar=50 μ m). FIG. 4E illustrates dense MAP2-ir fibers enveloping beta-gal+ Purkinje cells (scale bar=25 μ m). FIG. 4F illustrates beta-gal+ cells co-labeled with NeuN-ir in the deep cerebellar nucleus (scale bar=25 μ m).

FIGS. 5A through 5D are photomicrographs showing the production of markers for fibronectin (FIG. 5A) and differentiated BMSC with nerve cell markers (FIGS. 5B, 5C and 5D).

FIG. 6 is a Western blot of the lysates of BMSC conditioned with four different treatments and labeled with ***GFAP*** -ir, ***nestin*** and NeuN. BDNF+RA+N5 induced the strongest expression of nerve cell markers while glial cell markers was most strongly expressed after N5 alone.

FIGS. 7A through 7F are photomicrographs of human BMSC which were co-cultured with fetal rat striatal cells in N5 formulation with BDNF+RA. These figures show that human BMSC (green labeled in FIGS. 7C and 7D and yellow in FIGS. 7E and 7F) can be induced to express neural markers NeuN (FIGS. 7A and 7E) and ***GFAP*** (FIGS. 7B and 7F).

FIG. 8 is a photomicrograph of rat brain, showing that mouse BMSC labeled with red PKH26 also express the neuron marker NeuNir (green fluorescence). In addition, the morphology of the doubly labeled cells is that of neurons.

FIG. 9 is a photomicrograph of rat brain, showing a doubly labelled glial cell. The red fluorescent tracer identifies it as derived from a BMSC, and the green fluorescence is due to ***GFAP*** -ir. Note the morphology is that of a glial cell.

L5 ANSWER 90 OF 269 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 24
 AN 10124433 IFIPAT;IFIUDB;IFICDB
 TI EMBRYONIC STEM CELLS AND NEURAL PROGENITOR CELLS DERIVED THEREFROM; SUCH
 AS NEURAL PROGENITOR CELLS CAPABLE OF GIVING RISE TO MATURE SOMATIC CELLS
 INCLUDING NEURAL CELLS AND/OR GLIAL CELLS RECOGNIZABLE BY EXPRESSION OF
 SPECIFIC MARKERS
 IN Ben-Hur Tamir (IL); Pera Martin Frederick (AU); Reubinoff Benjamin Eithan
 (IL)

PI US 2002068045 A1 20020606
 AI US 2001-808382 20010314
 PRAI AU 2000-6211 20000314
 AU 2000-1279 20001106
 AU 2001-2920 20010206
 FI US 2002068045 20020606
 DT Utility; Patent Application - First Publication
 FS CHEMICAL
 APPLICATION
 CLMN 85
 GI 30 Figure(s).

FIG. 1 shows phase contrast micrographs of ES cells and their differentiated progeny. A, inner cell mass three days after plating. B, colony of ES cells. C, higher magnification of an area of an ES cell colony. D, an area of an ES cell colony undergoing spontaneous differentiation during routine passage. E, a colony four days after plating in the absence of a feeder cell layer but in the presence of 2000 units/ml human LIF undergoing differentiation in its periphery, F, neuronal cells in a high density culture. Scale bars: A and C, 25 microns; B and E, 100 microns; D and F, 50 microns.

FIG. 2 shows marker expression in ES cells and their differentiated somatic progeny. A, ES cell colony showing histochemical staining for alkaline phosphatase. B, ES cell colony stained with antibody MC-813-70 recognising the SSEA-4 epitope. C, ES cell colony stained with antibody TRAI-60. D, ES cell colony stained with antibody GCTM-2. E, high density culture, cell body and processes of a cell stained with antineurofilament 68 kDa protein. F, high density culture, cluster of cells and network of processes emanating from them stained with antibody against neural cell adhesion molecule. G, high density culture, cells showing cytoplasmic filaments stained with antibody to muscle actin. H, high density culture, cell showing cytoplasmic filaments stained with antibody to desmin. Scale bars: A, 100 microns; B-D, and F, 200 microns; E, G and H, 50 microns.

FIG. 3 shows RT-PCR analysis of gene expression in ES cells and their differentiated derivatives. All panels show 1.5% agarose gels stained with ethidium bromide. A, expression of Oct-4 and b-actin in ES stem cells and high density cultures. Lane 1, 100 bpDNA ladder. Lane 2, stem cell culture, b-actin. Lane 3, stem cell culture, Oct-4. Lane 4, stem cell culture, PCR for Oct-4 carried out with omission of reverse transcriptase. Lane 5, high density culture, b-actin. Lane 6, high density culture, Oct-4. Lane 7, high density culture, PCR for Oct-4 carried out with omission of reverse transcriptase. b-actin band is 200 bp and Oct-4 band is 320 bp. B, expression of *****nestin***** and Pax-6 in neural progenitor cells that were derived from differentiating ES colonies. Left lane, 100 bp DNA ladder; lane 1, b-actin in HX 142 neuroblastoma cell line (positive control for *****nestin***** PCR); lane 2, b-actin in neural progenitor cells; lane 3, *****nestin***** in HX 142 neuroblastoma cell line; lane 4, *****nestin***** in neural progenitor cells; lane 5, *****nestin***** PCR on same sample as lane 4 without addition of reverse transcriptase; lane 6, Pax-6; lane 7, Pax-6 PCR on same sample as line 6 without addition of reverse transcriptase. *****Nestin***** band is 208 bp, Pax-6 is 274 bp. C, expression of glutamic acid decarboxylase in cultures of neurons. Left lane, 100 bp DNA ladder; lane 1, b-actin; lane 2, b-actin PCR on same sample as lane 1 without addition of reverse transcriptase; lane 3, glutamic acid decarboxylase; lane 4 glutamic acid decarboxylase on same sample as lane 3 without addition of reverse transcriptase. Glutamic acid decarboxylase band is 284 bp. D, expression of GABA A alpha 2 receptor. Left lane, 100 bp DNA ladder; lane 1, b-actin; lane 2, GABA A alpha 2 receptor; lane 3, PCR without addition of reverse transcriptase. GABA A alpha 2 receptor subunit band is 471 bp.

FIG. 4 shows histology of differentiated elements found in teratomas formed in the testis of SCID mice following inoculation of HES-1 or HES-2 colonies. A, cartilage and squamous epithelium, HES-2. B, neural rosettes, HES-2. C, ganglion, gland and striated muscle, HES-1. D, bone and cartilage, HES-1. E, glandular epithelium, HES-1. F, ciliated columnar epithelium, HES-1. Scale bars: A-E, 100 microns; F, 50 microns.

FIG. 5 shows phase contrast microscopy and immunochemical analysis of marker expression in neural progenitor cells isolated from differentiating ES cultures. A, phase contrast image of a sphere formed in serum-free medium. B-D, indirect immunofluorescence staining of spheres, 4 hours after plating on adhesive substrate, for N-CAM, *****nestin*****, and vimentin respectively. In C and D, cells at the base of the sphere were placed in plane of focus to illustrate filamentous staining; confocal examination revealed that cells throughout the sphere were decorated by both antibodies. Scale bar is 100 microns in all

FIG. 6 shows phase contrast appearance and marker expression in cultures of neurons derived from progenitor cells shown in FIG. 5. A, phase contrast micrograph of differentiated cells emanating from a sphere plated onto adhesive surface. B-H, indirect immunofluorescence microscopy of differentiated cells decorated with antibodies against 200 kDa neurofilament protein (B), 160 kDa neurofilament protein (C), MAP2a+b (D), glutamate (E), synaptophysin (F), glutamic acid decarboxylase (G) and beta-tubulin (H). Scale bars: A, B, 100 microns; C, 200 microns; D, 20 microns; E and F, 10 microns; G, 20 microns; H, 25 microns.

FIG. 7 shows neural precursors proliferating as a monolayer on a plastic tissue culture dish in the presence of ***EGF*** and bFGF. These monolayer cultures of proliferating cells were obtained after prolonged cultivation (2-3 weeks) of the spheres in the presence of growth factors without sub-culturing.

FIG. 8 shows phase contrast appearance of a culture consisting of differentiated neural cells.

FIG. 9 shows phase contrast appearance of a sphere that is formed 72 hours after the transfer of a clump of undifferentiated ES cells into serum free medium (Scale bar 100 microns).

FIG. 10 shows linear correlation between the volume of spheres and the number of progenitor cells within a sphere. Spheres of various diameters that were generated from differentiating ES colonies and were propagated for 14-15 weeks were disaggregated into single cell suspension and the number of cells per sphere was counted.

FIG. 11 shows indirect immunofluorescence staining of a sphere, 4 hours after plating on adhesive substrate, for N-CAM. The sphere was generated by direct transfer of undifferentiated ES cells into serum free medium and propagation of the resulting spheres for 5 passages. (Scale bar 100 microns).

FIG. 12 shows indirect immunofluorescence membranous staining for N-CAM of single cells at the periphery of a sphere 4 hours after plating on adhesive substrate. The sphere was generated by direct transfer of undifferentiated ES cells into serum free medium and propagation of the resulting spheres for 5 passages. (Scale bar 25 microns).

FIG. 13 shows indirect immunofluorescence staining of a sphere 4 hours after plating on adhesive substrate for the intermediate filament ***nestin***. Cells at the base of the sphere were placed in plane of focus to illustrate filamentous staining. The sphere was generated by direct transfer of undifferentiated ES cells into serum free medium and propagation of resulting spheres for 5 passages. (Scale bar 25 microns).

FIG. 14 shows indirect immunofluorescence microscopy of a differentiated cell decorated with antibodies against the oligodendrocyte progenitor marker O4. (Scale bar 12.5 microns).

FIG. 15 shows indirect immunofluorescence staining of a sphere 4 hours after plating on adhesive substrate for the intermediate filament vimentin. Cells at the base of the sphere were placed in plane of focus to illustrate filamentous staining. The sphere was generated by direct transfer of undifferentiated ES cells into serum free medium and propagation of resulting spheres for 7 passages. (Scale bar 25 microns).

FIG. 16 shows the growth pattern of spheres that were generated directly from undifferentiated ES cells. Each bar represents the mean (+SD) increment in volume per week of 24 spheres at first to twelve weeks after derivation. A more excessive growth rate is evident during the first 5 weeks.

FIG. 17 shows persistent growth in the volume of spheres along time. Each bar represents the mean (+SD) increment in volume per week of 24 spheres at nine to twenty one weeks after derivation. The spheres were generated from differentiating ES colonies.

FIG. 18 shows linear correlation between the volume of spheres and the number of progenitor cells within a sphere. Spheres of various diameters, that were generated directly from undifferentiated ES cells and were propagated 5-7 weeks, were disaggregated into single cell suspension and the number of cells per sphere was counted.

FIG. 19 shows RT-PCR analysis of gene expression in ES cells (a week after passage) and neural spheres derived from differentiating colonies and directly from undifferentiated ES cell. All panels show 2% agarose gels stained with ethidium bromide. Lanes 1, 2 and 3, Oct-4 in ES cell culture, neural spheres derived from differentiating colonies, neural spheres derived from undifferentiated ES cells. Lane 4, stem cell culture, PCR for Oct-4 carried out with omission of reverse transcriptase. Lanes 5, 6, and 7, ***nestin*** in ES cell culture, neural spheres derived from differentiating colonies, neural spheres derived from undifferentiated ES cells. Lane 8, stem cell culture, PCR for ***nestin*** carried out with omission of reverse transcriptase. Lanes 9, 10 and 11, Pax-6 in ES cell culture, neural spheres derived from

cells. Lane 12, stem cell culture, PCR for Pax-6 carried out with omission of reverse transcriptase. Lane 13, 100 bp DNA ladder. Oct-4 band is 320 bp, ***nestin*** is 208 bp and Pax-6 is 274 bp.

FIG. 20 shows indirect immunofluorescence microscopy of differentiated astrocyte cells decorated with antibody against ***GFAP***. (Scale bar 25 microns).

FIG. 21 shows indirect immunofluorescence microscopy of brain sections of two mice (A and B) 4 weeks after transplantation of human neural precursors prelabeled with BrDU. Cells with a nucleus decorated with anti BrDU (brown stain, black arrow) are evident near the ventricular surface (white arrow indicate mouse unstained nuclei, bar=20 microns).

FIG. 22 shows indirect immunofluorescence microscopy of brain sections of a mice 4 weeks after transplantation of human neural precursors prelabeled with BrDU. Wide spread distribution of transplanted human cells decorated by anti BrDU antibodies is evident in the periventricular areas. The periventricular area in A is demonstrated at a higher magnification in B and C. (Bars=150, 60 and 30 microns in A, B and C).

FIG. 23 shows indirect immunocytochemical microscopy of brain sections of a mice 4 weeks after transplantation of human neural precursors prelabeled with BrDU. The transplanted human cells are migrating along the rostral migratory stream (bar=150 microns).

FIG. 24 shows RT-PCR analysis of gene expression in neural spheres derived from differentiating (A) and undifferentiated (B) ES cells. All panels show 2% agarose gels stained with ethidium bromide. Lanes 1 and 10, 100 bpDNA ladder; Lane 2, CD34; Lane 3, Flk-1; lane 4, HNF-3; lane 5, alfafetoprotein. Lanes 6-9 PCR reaction on the same samples as lanes 2-5 carried out with the omission of reverse transcriptase. CD-34 band is 200 bp, Flk-1 is 199, HNF-3 is 390, AFP is 340 bp.

FIG. 25 shows by RT-PCR analysis the expression of ***GFAP*** and the plp gene in differentiated cells from neural spheres derived from differentiating ES cell colonies. The expression of ***GFAP*** indicates differentiation into astrocytes while the presence of both dm-20 and plp transcripts indicate that differentiation into oligodendrocyte cells has occurred. Lanes 2,4,6 and lanes 3,5,7 are from two separate RNA samples from differentiated spheres that were independently derived from ES cells. Lane 1 and 8, 100 bp DNA ladder; Lanes 2 and 4, ***GFAP***; lanes 3 and 5, plp and dm-20; lanes 6 and 7, PCR reaction on the same samples as lanes 3 and 5 carried out with the omission of reverse transcriptase. ***GFAP*** band is 383, plp band is 354 bp and dm-20 is 249 bp.

FIG. 26 shows a dark field stereomicroscopic photograph of areas (arrows) destined to give rise to neural precursors in a differentiating ES cell colony 3 weeks after passage (bar=1.6 mm).

FIG. 27 shows indirect immunochemical analysis of marker expression in cultures of neurons derived from progenitor cells that were derived directly from undifferentiated ES cells: A, indirect immunofluorescence microscopy of neurites decorated with antibody against 160 kDa neurofilament protein. B and C, indirect immunofluorescence staining of differentiated cells for MAP2a+b and beta-tubulin III. Scale bars: A 100 microns, B and C 10 microns.

FIG. 28 shows indirect immunochemical analysis of the expression of tyrosine hydroxylase. Neurites (A) and a differentiated cell (B) are decorated with antibodies against tyrosine hydroxylase. Scale bars: 30 microns.

FIG. 29 shows in vivo differentiation into astrocyte cells of transplanted human neural progenitors prelabeled with BrDU. Donor cells are identified by indirect immunochemical detection of BrDU (dark nuclei, arrows). Dual staining demonstrates donor cells decorated by anti ***GFAP*** (orange). Transplanted cells are migrating into the brain parenchyma (white arrow) and are also found in the periventricular zone (dark arrow) (A), A higher magnification of cells that have differentiated into astrocytes and migrated into the host brain (B).

FIG. 30 shows in vivo differentiation into oligodendrocyte cells of transplanted human neural progenitors prelabeled with BrDU. Donor cells are identified by indirect immunochemical detection of BrDU (dark nuclei, arrows). Dual staining demonstrates donor cells decorated by anti CNPase (orange). !

DT Utility
FS APPLICATION
LN.CNT 977
INCL INCLM: 435/007.230
INCLS: 435/007.100; 436/063.000; 436/064.000
NCL NCLM: 435/007.230
NCLS: 435/007.100; 436/063.000; 436/064.000; 436/813.000
IC [7]
ICM: A61M036-14
ICS: A61K051-00; G01N033-53; G01N033-574; G01N033-48
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 92 OF 269 USPATFULL on STN DUPLICATE 26
AN 2002:185669 USPATFULL
TI Differentiated stem cells suitable for human therapy
IN Gold, Joseph D., San Francisco, CA, UNITED STATES
Lebkowski, Jane S., Portola Valley, CA, UNITED STATES
PI US 2002098582 A1 20020725
US 6576464 B2 20030610
AI US 2001-783203 A1 20010213 (9)
PRAI US 2000-253443P 20001127 (60)
US 2000-253357P 20001127 (60)
DT Utility
FS APPLICATION
LN.CNT 3087
INCL INCLM: 435/366.000
INCLS: 424/093.210; 435/194.000
NCL NCLM: 435/325.000
NCLS: 536/023.100; 536/023.400; 536/024.100; 536/025.500
IC [7]
ICM: A61K048-00
ICS: C12N005-08; C12N009-12
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 93 OF 269 USPATFULL on STN DUPLICATE 27
AN 2002:72652 USPATFULL
TI Method for production of neuroblasts
IN Gage, Fred H., La Jolla, CA, UNITED STATES
Ray, Jasodhara, San Diego, CA, UNITED STATES
PI US 2002039789 A1 20020404
US 6599695 B2 20030729
AI US 2001-915229 A1 20010724 (9)
RLI Continuation of Ser. No. US 1997-884427, filed on 27 Jun 1997, GRANTED,
Pat. No. US 6265175 Continuation of Ser. No. US 1995-445075, filed on 19
May 1995, ABANDONED Division of Ser. No. US 1993-147843, filed on 3 Nov
1993, GRANTED, Pat. No. US 5766948 Continuation-in-part of Ser. No. US
1993-1543, filed on 6 Jan 1993, ABANDONED
DT Utility
FS APPLICATION
LN.CNT 1624
INCL INCLM: 435/368.000
NCL NCLM: 435/004.000
NCLS: 435/006.000; 435/007.100; 435/007.200; 435/007.210; 435/029.000
IC [7]
ICM: C12N005-08

L5 ANSWER 94 OF 269 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
AN 2003-09341 BIOTECHDS
TI Generating substantially homogeneous population of undifferentiated cells
from sample, by disrupting tissue sample, discriminating cells in
population based on size and performing cell-surface marker-
discrimination;
for tissue engineering and gene therapy
AU BARTLETT P F; RIETZE R L
PA HALL INST MEDICAL RES WALTER and ELIZA
PI WO 2002097067 5 Dec 2002
AI WO 2002-AU700 31 May 2002
PRAI AU 2001-5403 1 Jun 2001; AU 2001-5403 1 Jun 2001
DT Patent
LA English
OS WPI: 2003-140465 [13]

L5 ANSWER 95 OF 269 USPATFULL on STN
AN 2002:337936 USPATFULL
TI ****TGF*** -alpha polypeptides, functional fragments and methods of

IN Twardzik, Daniel R., Bainbridge Island, WA, UNITED STATES
Pernet, Andre, Lake Forest, IL, UNITED STATES
Felker, Thomas S., Vashon, WA, UNITED STATES
Paskell, Stefan, Bainbridge Island, WA, UNITED STATES
PA Stem Cell Pharmaceuticals, Inc. (U.S. corporation)
PI US 2002193301 A1 20021219
AI US 2002-39119 A1 20020104 (10)
RLI Continuation of Ser. No. US 2000-641587, filed on 17 Aug 2000, PENDING
Continuation-in-part of Ser. No. US 2000-492935, filed on 27 Jan 2000,
PENDING Continuation-in-part of Ser. No. US 1999-378567, filed on 19 Aug
1999, PENDING
DT Utility
FS APPLICATION
LN.CNT 2673
INCL INCLM: 514/012.000
NCL NCLM: 514/012.000
IC [7]
ICM: A61K038-18
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 96 OF 269 USPATFULL on STN
AN 2002:322564 USPATFULL
TI Method for transdifferentiation of non pancreatic stem cells to the
pancreatic differentiation pathway
IN Ramiya, Vijayakumar, Gainesville, FL, UNITED STATES
Clark, Amy, Gainesville, FL, UNITED STATES
PI US 2002182728 A1 20021205
AI US 2002-113118 A1 20020329 (10)
PRAI US 2001-279922P 20010329 (60)
DT Utility
FS APPLICATION
LN.CNT 775
INCL INCLM: 435/366.000
INCL: 424/093.210; 424/093.700
NCL NCLM: 435/366.000
NCL: 424/093.210; 424/093.700
IC [7]
ICM: A61K048-00
ICS: C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 97 OF 269 USPATFULL on STN
AN 2002:315966 USPATFULL
TI Transgenic mice expressing fluorescent protein
IN Enikolopov, Grigori N., Cold Spring Harbor, NY, UNITED STATES
Mignone, John, Bronxville, NY, UNITED STATES
PA Cold Spring Harbor Laboratory (U.S. corporation)
PI US 2002178460 A1 20021128
AI US 2002-150509 A1 20020516 (10)
RLI Continuation of Ser. No. WO 2000-US31150, filed on 14 Nov 2000, PENDING
Continuation-in-part of Ser. No. US 1999-444335, filed on 19 Nov 1999,
PENDING
DT Utility
FS APPLICATION
LN.CNT 1425
INCL INCLM: 800/018.000
NCL NCLM: 800/018.000
IC [7]
ICM: A01K067-027
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 98 OF 269 USPATFULL on STN
AN 2002:301574 USPATFULL
TI ***TGF*** -alpha polypeptides, functional fragments and methods of
use therefor
IN Twardzik, Daniel R., Bainbridge Island, WA, UNITED STATES
Pernet, Andre, Lake Forest, IL, UNITED STATES
Felker, Thomas S., Vashon, WA, UNITED STATES
Paskell, Stefan, Bainbridge Island, WA, UNITED STATES
PI US 2002169119 A1 20021114
AI US 2001-932172 A1 20010817 (9)
RLI Continuation-in-part of Ser. No. US 2000-641587, filed on 17 Aug 2000,
PENDING Continuation-in-part of Ser. No. US 2000-492935, filed on 27 Jan
2000, PENDING Continuation-in-part of Ser. No. US 1999-378567, filed on
19 Aug 1999, PENDING

FS APPLICATION
LN.CNT 2472
INCL INCLM: 514/012.000
NCL NCLM: 514/012.000
IC [7]
ICM: A61K038-18

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 99 OF 269 USPATFULL on STN
AN 2002:301223 USPATFULL
TI Method of isolating human neuroepithelial precursor cells from human fetal tissue
IN Mayer-Proschel, Margot, Pittsford, NY, UNITED STATES
Rao, Mahendra S., Salt Lake City, UT, UNITED STATES
Tresco, Patrick A., Sandy, UT, UNITED STATES
Messina, Darin J., Salt Lake City, UT, UNITED STATES
PI US 2002168767 A1 20021114
AI US 2001-813429 A1 20010321 (9)
DT Utility
FS APPLICATION
LN.CNT 829
INCL INCLM: 435/368.000
INCLS: 800/008.000
NCL NCLM: 435/368.000
NCLS: 800/008.000
IC [7]
ICM: C12N005-08
ICS: A01K067-00

L5 ANSWER 100 OF 269 USPATFULL on STN
AN 2002:301222 USPATFULL
TI Genetically altered human pluripotent stem cells
IN Gold, Joseph D., San Francisco, CA, UNITED STATES
Carpenter, Melissa K., Castro Valley, CA, UNITED STATES
Inokuma, Margaret S., San Jose, CA, UNITED STATES
Xu, Chunhui, Cupertino, CA, UNITED STATES
PI US 2002168766 A1 20021114
AI US 2001-849022 A1 20010504 (9)
PRAI US 2000-175581P 20000111 (60)
US 2000-213740P 20000622 (60)
US 2000-213739P 20000622 (60)
US 2000-216387P 20000707 (60)
US 2000-220064P 20000721 (60)
US 2000-257608P 20001222 (60)
DT Utility
FS APPLICATION
LN.CNT 2640
INCL INCLM: 435/366.000
INCLS: 435/455.000
NCL NCLM: 435/366.000
NCLS: 435/455.000
IC [7]
ICM: C12N005-08
ICS: C12N015-87

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 101 OF 269 USPATFULL on STN
AN 2002:301219 USPATFULL
TI Isolated homozygous stem cells, differentiated cells derived therefrom, and materials and methods for making and using same
IN Yan, Wen Liang, Potomac, MD, UNITED STATES
Huang, Steve Chien-Wen, Germantown, MD, UNITED STATES
Nguyen, Minh-Thanh, Rockville, MD, UNITED STATES
Lin, Hua (Helen), Potomac, MD, UNITED STATES
Lei, Jingqi, Gaithersburg, MD, UNITED STATES
Khanna, Ruchi, Germantown, MD, UNITED STATES
PI US 2002168763 A1 20021114
AI US 2001-997240 A1 20011130 (9)
PRAI US 2000-253943P 20001130 (60)
DT Utility
FS APPLICATION
LN.CNT 3422
INCL INCLM: 435/325.000
INCLS: 435/354.000; 435/366.000; 435/350.000
NCL NCLM: 435/325.000

IC [7]
ICM: C12N005-06
ICS: C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 102 OF 269 USPATFULL on STN
AN 2002:300807 USPATFULL
TI Methods for treating disorders of neuronal deficiency with bone marrow-derived cells
IN Brazelton, Timothy R., Cupertino, CA, UNITED STATES
Blau, Helen M., Menlo Park, CA, UNITED STATES
PI US 2002168350 A1 20021114
AI US 2001-993045 A1 20011113 (9)
PRAI US 2000-247128P 20001110 (60)
DT Utility
FS APPLICATION
LN.CNT 1696
INCL INCLM: 424/093.210
INCLS: 424/093.700
NCL NCLM: 424/093.210
NCLS: 424/093.700
IC [7]
ICM: A61K048-00

L5 ANSWER 103 OF 269 USPATFULL on STN
AN 2002:294751 USPATFULL
TI Human cord blood derived unrestricted somatic stem cells (USSC)
IN Wernet, Peter, Duesseldorf, GERMANY, FEDERAL REPUBLIC OF
PI US 2002164794 A1 20021107
AI US 2001-985335 A1 20011102 (9)
PRAI US 2000-245168P 20001103 (60)
DT Utility
FS APPLICATION
LN.CNT 895
INCL INCLM: 435/372.000
NCL NCLM: 435/372.000
IC [7]
ICM: C12N005-08

L5 ANSWER 104 OF 269 USPATFULL on STN
AN 2002:294271 USPATFULL
TI Cultures of human CNS neural stem cells
IN Carpenter, Melissa, Foster City, CA, UNITED STATES
PI US 2002164309 A1 20021107
AI US 2002-134234 A1 20020429 (10)
RLI Continuation of Ser. No. US 2000-486302, filed on 16 Oct 2000, PENDING A
371 of International Ser. No. WO 1998-US18597, filed on 4 Sep 1998,
UNKNOWN
DT Utility
FS APPLICATION
LN.CNT 995
INCL INCLM: 424/093.700
INCLS: 435/368.000
NCL NCLM: 424/093.700
NCLS: 435/368.000
IC [7]
ICM: C12N005-08
ICS: A61K045-00
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 105 OF 269 USPATFULL on STN
AN 2002:280006 USPATFULL
TI Using overexpression of laminin alpha 4 subunit as a diagnostic and prognostic indicator of malignant tumors
IN Ljubimova, Julia Y., Studio City, CA, UNITED STATES
Ljubimov, Alexander V., Studio City, CA, UNITED STATES
Black, Keith L., Los Angeles, CA, UNITED STATES
PI US 2002155440 A1 20021024
AI US 2000-741550 A1 20001219 (9)
DT Utility
FS APPLICATION
LN.CNT 2437
INCL INCLM: 435/006.000
INCLS: 435/007.230
NCL NCLM: 435/006.000

IC [7]
ICM: C12Q001-68
ICS: G01N033-574
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 106 OF 269 USPATFULL on STN
AN 2002:272935 USPATFULL
TI Novel differentiation inducing process of embryonic stem cell to
ectodermal cell and its use
IN Sasai, Yoshiki, Kyoto, JAPAN
Nishikawa, Shin-Ichi, Kyoto, JAPAN
PI US 2002151056 A1 20021017
AI US 2001-855587 A1 20010516 (9)
PRAI JP 2000-144059 20000516
JP 2000-290819 20000925
US 2000-257049P 20001220 (60)
DT Utility
FS APPLICATION
LN.CNT 4056
INCL INCLM: 435/368.000
NCL NCLM: 435/368.000
IC [7]
ICM: C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 107 OF 269 USPATFULL on STN
AN 2002:272932 USPATFULL
TI Direct differentiation of human pluripotent stem cells and
characterization of differentiated cells
IN Carpenter, Melissa K., Castro Valley, CA, UNITED STATES
Funk, Walter D., Hayward, CA, UNITED STATES
Thies, R. Scott, Pleasanton, CA, UNITED STATES
PI US 2002151053 A1 20021017
AI US 2002-87473 A1 20020301 (10)
RLI Continuation of Ser. No. US 2001-888309, filed on 21 Jun 2001, PENDING
PRAI US 2000-213739P 20000622 (60)
US 2000-216387P 20000707 (60)
US 2000-220064P 20000721 (60)
US 2000-213740P 20000622 (60)
DT Utility
FS APPLICATION
LN.CNT 2173
INCL INCLM: 435/366.000
NCL NCLM: 435/366.000
IC [7]
ICM: C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 108 OF 269 USPATFULL on STN
AN 2002:258890 USPATFULL
TI Generation, characterization, and isolation of neuroepithelial stem
cells and lineage restricted intermediate precursor
IN Rao, Mahendra S., Salt Lake City, UT, UNITED STATES
Mayer-Proschel, Margot, Sandy, UT, UNITED STATES
PI US 2002142460 A1 20021003
AI US 2001-25333 A1 20011219 (10)
RLI Continuation of Ser. No. US 1997-852744, filed on 7 May 1997, GRANTED,
Pat. No. US 6361996
DT Utility
FS APPLICATION
LN.CNT 1407
INCL INCLM: 435/368.000
NCL NCLM: 435/368.000
IC [7]
ICM: C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 109 OF 269 USPATFULL on STN
AN 2002:251257 USPATFULL
TI Techniques for growth and differentiation of human pluripotent stem
cells
IN Carpenter, Melissa K., Castro Valley, CA, UNITED STATES
Funk, Walter D., Hayward, CA, UNITED STATES
Gold, Joseph D., San Francisco, CA, UNITED STATES
Inokuma, Margaret S., San Jose, CA, UNITED STATES

PI US 2002137204 A1 20020926
 AI US 2001-39956 A1 20011023 (10)
 RLI Continuation of Ser. No. US 2001-859291, filed on 16 May 2001, PENDING
 PRAI WO 2001-US1030 20010110
 US 2000-175581P 20000111 (60)
 US 2000-213740P 20000622 (60)
 US 2000-213739P 20000622 (60)
 US 2000-216387P 20000707 (60)
 US 2000-220064P 20000721 (60)
 DT Utility
 FS APPLICATION
 LN.CNT 4058
 INCL INCLM: 435/366.000
 NCL NCLM: 435/366.000
 IC [7]
 ICM: C12N005-08
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 110 OF 269 USPATFULL on STN
 AN 2002:243053 USPATFULL
 TI Cell lineage markers
 IN Lovell-Badge, Robin, Mill Hill, UNITED KINGDOM
 Pevny, Larysa Halyna, Chapel Hill, NC, UNITED STATES
 Episkopou, Vasso, UNITED STATES
 PI US 2002132239 A1 20020919
 AI US 2001-886899 A1 20010621 (9)
 PRAI GB 1998-28383 19981222
 WO 1999-GB4336 19991221
 DT Utility
 FS APPLICATION
 LN.CNT 2157
 INCL INCLM: 435/006.000
 INCLS: 435/007.210; 435/368.000
 NCL NCLM: 435/006.000
 NCLS: 435/007.210; 435/368.000
 IC [7]
 ICM: C12Q001-68
 ICS: G01N033-567; C12N005-08
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 111 OF 269 USPATFULL on STN
 AN 2002:228305 USPATFULL
 TI ***TGF*** -alpha polypeptides, functional fragments and methods of
 use therefor
 IN Twardzik, Daniel R., Bainbridge Island, WA, UNITED STATES
 Pernet, Andre, Lake Forest, IL, UNITED STATES
 Felker, Thomas S., Vashon, WA, UNITED STATES
 Paskell, Stefan, Bainbridge Island, WA, UNITED STATES
 PA Stem Cell Pharmaceuticals, Inc. (U.S. corporation)
 PI US 2002123465 A1 20020905
 AI US 2002-50190 A1 20020115 (10)
 RLI Continuation of Ser. No. US 2000-641587, filed on 17 Aug 2000, PENDING
 Continuation-in-part of Ser. No. US 2000-492935, filed on 27 Jan 2000,
 PENDING Continuation-in-part of Ser. No. US 1999-378567, filed on 19 Aug
 1999, PENDING
 DT Utility
 FS APPLICATION
 LN.CNT 2684
 INCL INCLM: 514/012.000
 NCL NCLM: 514/012.000
 IC [7]
 ICM: A61K038-19
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 112 OF 269 USPATFULL on STN
 AN 2002:213684 USPATFULL
 TI Drug screening system
 IN Terada, Naohiro, Gainesville, FL, UNITED STATES
 Hamazaki, Takashi, Gainesville, FL, UNITED STATES
 PI US 2002115059 A1 20020822
 AI US 2001-45721 A1 20011026 (10)
 PRAI US 2000-243549P 20001026 (60)
 DT Utility
 FS APPLICATION
 LN.CNT 804

NCL INCLS: 435/007.200; 435/007.210; 435/354.000
NCLM: 435/004.000
IC NCLS: 435/007.200; 435/007.210; 435/354.000
[7]
ICM: C12Q001-00
ICS: G01N033-53; G01N033-567; C12N005-06
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 113 OF 269 USPATFULL on STN
AN 2002:213415 USPATFULL
TI Cell implantation therapy for neurological diseases or disorders
IN Isacson, Ole, Cambridge, MA, UNITED STATES
Kim, Kwang Soo, Lexington, MA, UNITED STATES
PI US 2002114788 A1 20020822
AI US 2001-917126 A1 20010727 (9)
RLI Continuation-in-part of Ser. No. US 2000-626677, filed on 27 Jul 2000,
PENDING
DT Utility
FS APPLICATION
LN.CNT 1427
INCL INCLM: 424/093.210
INCLS: 435/368.000; 435/456.000
NCL NCLM: 424/093.210
NCLS: 435/368.000; 435/456.000
IC [7]
ICM: A61K048-00
ICS: C12N005-08

L5 ANSWER 114 OF 269 USPATFULL on STN
AN 2002:193036 USPATFULL
TI Transgenic animals for screening therapeutic agents for brain tumors
IN Chiu, Ing-Ming, Dublin, OH, UNITED STATES
PI US 2002104114 A1 20020801
AI US 2001-990249 A1 20011121 (9)
PRAI US 2000-252745P 20001122 (60)
DT Utility
FS APPLICATION
LN.CNT 1153
INCL INCLM: 800/018.000
NCL NCLM: 800/018.000
IC [7]
ICM: A01K067-027
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 115 OF 269 USPATFULL on STN
AN 2002:191488 USPATFULL
TI Molecular markers for the diagnosis of alzheimer's disease
IN Coleman, Paul D., Rochester, NY, UNITED STATES
Chow, Nienwen, Rochester, NY, UNITED STATES
Cox, Christopher, Pittsford, NY, UNITED STATES
PA University of Rochester (U.S. corporation)
PI US 2002102553 A1 20020801
AI US 2001-770534 A1 20010125 (9)
RLI Continuation of Ser. No. US 1998-178170, filed on 23 Oct 1998, ABANDONED
PRAI US 1997-63274P 19971024 (60)
DT Utility
FS APPLICATION
LN.CNT 2538
INCL INCLM: 435/006.000
INCLS: 435/091.200
NCL NCLM: 435/006.000
NCLS: 435/091.200
IC [7]
ICM: C12Q001-68
ICS: C12P019-34
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 116 OF 269 USPATFULL on STN
AN 2002:171974 USPATFULL
TI Techniques for growth and differentiation of human pluripotent stem
cells
IN Carpenter, Melissa K., Castro Valley, CA, UNITED STATES
Inokuma, Margaret S., San Jose, CA, UNITED STATES
Xu, Chunhui, Cupertino, CA, UNITED STATES
PI US 2002090723 A1 20020711

RLI Continuation of Ser. No. US 2001-859291, filed on 16 May 2001, PENDING

PRAI WO 2001-US1030 20010110
WO 2001-51616 20010719
US 2000-175581P 20000111 (60)
US 2000-213740P 20000622 (60)
US 2000-213739P 20000622 (60)
US 2000-216387P 20000707 (60)
US 2000-220064P 20000721 (60)

DT Utility

FS APPLICATION

LN.CNT 3920

INCL INCLM: 435/366.000

INCLS: 435/368.000

NCL NCLM: 435/366.000

NCLS: 435/368.000

IC [7]

ICM: C12N005-08

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 117 OF 269 USPATFULL on STN

AN 2002:171854 USPATFULL

TI Methods of differentiating and protecting cells by modulating the
P38/MEF2 pathway

IN Lipton, Stuart A., Rancho Santa Fe, CA, UNITED STATES

Okamoto, Shu-ichi, San Diego, CA, UNITED STATES

PI US 2002090603 A1 20020711

AI US 2001-876187 A1 20010605 (9)

PRAI US 2000-209539P 20000605 (60)

DT Utility

FS APPLICATION

LN.CNT 2262

INCL INCLM: 435/004.000

INCLS: 435/372.000

NCL NCLM: 435/004.000

NCLS: 435/372.000

IC [7]

ICM: C12Q001-00

ICS: C12N005-08

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 118 OF 269 USPATFULL on STN

AN 2002:164392 USPATFULL

TI Tolerizing allografts of pluripotent stem cells

IN Chiu, Choy-Pik, Cupertino, CA, UNITED STATES

Kay, Robert M., San Francisco, CA, UNITED STATES

PI US 2002086005 A1 20020704

AI US 2001-990522 A1 20011121 (9)

PRAI US 2000-252688P 20001122 (60)

DT Utility

FS APPLICATION

LN.CNT 1045

INCL INCLM: 424/093.210

INCLS: 424/093.700; 435/366.000

NCL NCLM: 424/093.210

NCLS: 424/093.700; 435/366.000

IC [7]

ICM: A61K048-00

ICS: C12N005-08

L5 ANSWER 119 OF 269 USPATFULL on STN

AN 2002:157125 USPATFULL

TI Techniques for growth and differentiation of human pluripotent stem
cells

IN Carpenter, Melissa K., Castro Valley, CA, UNITED STATES

Funk, Walter D., Hayward, CA, UNITED STATES

Gold, Joseph D., San Francisco, CA, UNITED STATES

Inokuma, Margaret S., San Jose, CA, UNITED STATES

Xu, Chunhui, Cupertino, CA, UNITED STATES

PI US 2002081724 A1 20020627

AI US 2001-859291 A1 20010516 (9)

RLI Continuation of Ser. No. WO 2001-US1030, filed on 10 Jan 2001, UNKNOWN

PRAI US 2000-175581P 20000111 (60)

US 2000-213740P 20000622 (60)

US 2000-213739P 20000622 (60)

US 2000-216387P 20000707 (60)

DT Utility
FS APPLICATION
LN.CNT 4037
INCL INCLM: 435/366.000
INCLS: 435/354.000; 435/384.000
NCL NCLM: 435/366.000
NCLS: 435/354.000; 435/384.000
IC [7]
ICM: C12N005-06
ICS: C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 120 OF 269 USPATFULL on STN
AN 2002:156691 USPATFULL
TI NRG-2 nucleic acid molecules, polypeptides, and diagnostic and
therapeutic methods
IN Marchionni, Mark, Arlington, MA, UNITED STATES
PI US 2002081286 A1 20020627
AI US 2001-864675 A1 20010523 (9)
PRAI US 2000-206495P 20000523 (60)
DT Utility
FS APPLICATION
LN.CNT 1982
INCL INCLM: 424/094.100
INCLS: 424/085.100
NCL NCLM: 424/094.100
NCLS: 424/085.100
IC [7]
ICM: A61K038-43
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 121 OF 269 USPATFULL on STN
AN 2002:106321 USPATFULL
TI Compositions and methods for promoting tissue regeneration
IN Neuberger, Timothy J., Dobbs Ferry, NY, UNITED STATES
Herzberg, Uri, Guilford, CT, UNITED STATES
Mallon, Veronica, New City, NY, UNITED STATES
PI US 2002055530 A1 20020509
AI US 2001-827666 A1 20010406 (9)
PRAI US 2000-195516P 20000406 (60)
DT Utility
FS APPLICATION
LN.CNT 2322
INCL INCLM: 514/381.000
INCLS: 514/382.000; 514/396.000; 514/397.000; 514/437.000; 514/438.000;
424/093.700; 514/618.000; 514/631.000
NCL NCLM: 514/381.000
NCLS: 514/382.000; 514/396.000; 514/397.000; 514/437.000; 514/438.000;
424/093.700; 514/618.000; 514/631.000
IC [7]
ICM: A61K045-00
ICS: A61K031-4178; A61K031-41; A61K031-382; A61K031-381
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 122 OF 269 USPATFULL on STN
AN 2002:85211 USPATFULL
TI COMMON NEURAL PROGENITOR FOR THE CNS AND PNS
IN RAO, MAHENDRA S., SALT LAKE CITY, UT, UNITED STATES
MUJTABA, TAHMINA, SANDY, UT, UNITED STATES
PI US 2002045251 A1 20020418
AI US 1998-73881 A1 19980506 (9)
RLI Continuation-in-part of Ser. No. US 1997-852744, filed on 7 May 1997,
PENDING
DT Utility
FS APPLICATION
LN.CNT 2636
INCL INCLM: 435/325.000
INCLS: 435/368.000; 435/373.000; 435/387.000; 435/384.000; 435/383.000;
435/391.000; 435/395.000; 435/402.000; 435/377.000
NCL NCLM: 435/325.000
NCLS: 435/368.000; 435/373.000; 435/387.000; 435/384.000; 435/383.000;
435/391.000; 435/395.000; 435/402.000; 435/377.000
IC [7]
ICM: C12N005-08
TCS: C12N005-06

L5 ANSWER 123 OF 269 USPATFULL on STN
AN 2002:72587 USPATFULL
TI Neural progenitor cell populations
IN Carpenter, Melissa K., Castro Valley, CA, UNITED STATES
PI US 2002039724 A1 20020404
AI US 2001-872183 A1 20010531 (9)
RLI Division of Ser. No. WO 2001-US15861, filed on 16 May 2001, UNKNOWN
Division of Ser. No. US 2001-859351, filed on 16 May 2001, PENDING
PRAI US 2000-205600P 20000517 (60)
US 2000-257608P 20001222 (60)
DT Utility
FS APPLICATION
LN.CNT 1846
INCL INCLM: 435/004.000
INCLS: 435/368.000
NCL NCLM: 435/004.000
NCLS: 435/368.000
IC [7]
ICM: C12Q001-00
ICS: C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 124 OF 269 USPATFULL on STN
AN 2002:66630 USPATFULL
TI Methods of transducing neural cells using lentivirus vectors
IN Davidson, Beverly L., North Liberty, IA, UNITED STATES
Alisky, Joseph M., Iowa City, IA, UNITED STATES
Dubensky, Thomas W., JR., Piedmont, CA, UNITED STATES
Hughes, Stephanie M., Iowa City, IA, UNITED STATES
Jolly, Douglas, Encinitas, CA, UNITED STATES
Sauter, Sybille L., Del Mar, CA, UNITED STATES
PI US 2002037281 A1 20020328
AI US 2001-866532 A1 20010525 (9)
PRAI US 2000-207541P 20000526 (60)
US 2001-279035P 20010327 (60)
DT Utility
FS APPLICATION
LN.CNT 1641
INCL INCLM: 424/093.210
INCLS: 435/456.000; 435/368.000
NCL NCLM: 424/093.210
NCLS: 435/456.000; 435/368.000
IC [7]
ICM: C12N015-867
ICS: A61K048-00; C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 125 OF 269 USPATFULL on STN
AN 2002:54631 USPATFULL
TI Enriched central nervous system stem cell and progenitor cell
populations, and methods for identifying, isolating and enriching for
such populations
IN Uchida, Nobuko, Palo Alto, CA, UNITED STATES
Buck, David W., Santa Clara, CA, UNITED STATES
Weissman, Irving, Redwood City, CA, UNITED STATES
PI US 2002031792 A1 20020314
AI US 2001-927012 A1 20010809 (9)
RLI Division of Ser. No. US 1999-422844, filed on 21 Oct 1999, PENDING
PRAI US 1999-119725P 19990212 (60)
DT Utility
FS APPLICATION
LN.CNT 1160
INCL INCLM: 435/007.210
INCLS: 435/368.000
NCL NCLM: 435/007.210
NCLS: 435/368.000
IC [7]
ICM: G01N033-53
ICS: G01N033-567; C12N005-08

L5 ANSWER 126 OF 269 USPATFULL on STN
AN 2002:48319 USPATFULL
TI Human cord blood as a source of neural tissue for repair of the brain
and spinal cord

Sanchez-Remos, Juan, Tampa, FL, UNITED STATES
Willing, Alison, Tampa, FL, UNITED STATES
Richard, Daniel D., Sedona, AZ, UNITED STATES
PI US 2002028510 A1 20020307
AI US 2001-801221 A1 20010307 (9)
PRAI US 2000-188069P 20000309 (60)
US 2001-269238P 20010216 (60)
DT Utility
FS APPLICATION
LN.CNT 3155
INCL INCLM: 435/368.000
NCL NCLM: 435/368.000
IC [7]
ICM: C12N005-08

L5 ANSWER 127 OF 269 USPATFULL on STN
AN 2002:42940 USPATFULL
TI Novel interferon for the treatment of multiple sclerosis
IN Croze, Edward M., Lafayette, CA, UNITED STATES
Faulds, Daryl, Mill Valley, CA, UNITED STATES
Wagner, T. Charis, Oakland, CA, UNITED STATES
PI US 2002025304 A1 20020228
AI US 2001-881050 A1 20011113 (9)
PRAI US 2000-212046P 20000616 (60)
DT Utility
FS APPLICATION
LN.CNT 1842
INCL INCLM: 424/085.600
NCL NCLM: 424/085.600
IC [7]
ICM: A61K038-21
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 128 OF 269 USPATFULL on STN
AN 2002:37550 USPATFULL
TI Methods of culturing embryonic stem cells and controlled differentiation
IN Pera, Martin Frederick, Prahran, AUSTRALIA
PI US 2002022267 A1 20020221
AI US 2001-885679 A1 20010620 (9)
PRAI AU 2000-1327 20001108
AU 2000-8242 20000620
DT Utility
FS APPLICATION
LN.CNT 1207
INCL INCLM: 435/366.000
NCL NCLM: 435/366.000
IC [7]
ICM: C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 129 OF 269 USPATFULL on STN
AN 2002:32225 USPATFULL
TI Direct differentiation of human pluripotent stem cells and
characterization of differentiated cells
IN Carpenter, Melissa K., Castro Valley, CA, UNITED STATES
Funk, Walter D., Hayward, CA, UNITED STATES
Thies, R. Scott, Pleasanton, CA, UNITED STATES
PI US 2002019046 A1 20020214
AI US 2001-888309 A1 20010621 (9)
PRAI US 2000-213739P 20000622 (60)
US 2000-216387P 20000707 (60)
US 2000-220064P 20000721 (60)
DT Utility
FS APPLICATION
LN.CNT 2164
INCL INCLM: 435/368.000
INCL: 435/091.100; 435/004.000
NCL NCLM: 435/368.000
NCL: 435/091.100; 435/004.000
IC [7]
ICM: C12Q001-00
ICS: C12N005-08; C12P019-34
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 130 OF 269 USPATFULL on STN

TI Method for isolating and purifying multipotential neural progenitor cells and multipotential neural progenitor cells
IN Goldman, Steven A., South Salem, NY, UNITED STATES
Okano, Hideyuki, Osaka, JAPAN
PI US 2002012903 A1 20020131
AI US 2000-747810 A1 20001222 (9)
PRAI US 1999-173003P 19991223 (60)
DT Utility
FS APPLICATION
LN.CNT 2350
INCL INCLM: 435/004.000
INCLS: 435/368.000
NCL NCLM: 435/004.000
NCLS: 435/368.000
IC [7]
ICM: C12Q001-00
ICS: C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 131 OF 269 USPATFULL on STN
AN 2002:16863 USPATFULL
TI Neural progenitor cell populations
IN Carpenter, Melissa K., Castro Valley, CA, UNITED STATES
PI US 2002009743 A1 20020124
AI US 2001-859351 A1 20010516 (9)
PRAI US 2000-205600P 20000517 (60)
US 2000-257608P 20001222 (60)
DT Utility
FS APPLICATION
LN.CNT 1895
INCL INCLM: 435/006.000
INCLS: 424/093.210; 435/368.000
NCL NCLM: 435/006.000
NCLS: 424/093.210; 435/368.000
IC [7]
ICM: A61K048-00
ICS: C12Q001-68; C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 132 OF 269 USPATFULL on STN
AN 2002:16585 USPATFULL
TI Porcine neural cells and their use in treatment of neurological deficits due to neurodegenerative diseases
IN Isacson, Ole, Cambridge, MA, UNITED STATES
Dinsmore, Jonathan, Brookline, MA, UNITED STATES
PA Diacrin, Inc. (U.S. corporation)
PI US 2002009461 A1 20020124
AI US 2001-847881 A1 20010502 (9)
RLI Division of Ser. No. US 1995-554779, filed on 7 Nov 1995, GRANTED, Pat. No. US 6258353 Continuation-in-part of Ser. No. US 1995-424851, filed on 19 Apr 1995, GRANTED, Pat. No. US 6294383 Continuation-in-part of Ser. No. US 1994-336856, filed on 8 Nov 1994, ABANDONED
DT Utility
FS APPLICATION
LN.CNT 5037
INCL INCLM: 424/193.100
INCLS: 424/093.700; 435/325.000
NCL NCLM: 424/193.100
NCLS: 424/093.700; 435/325.000
IC [7]
ICM: A61K039-385
ICS: C12N005-06; A61K045-00
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 133 OF 269 USPATFULL on STN
AN 2002:12280 USPATFULL
TI GENETICALLY-MODIFIED NEURAL PROGENITORS AND USES THEREOF
IN SABATE, OLIVIER, PARIS, FRANCE
HORELLOU, PHILIPPE, PARIS, FRANCE
BUC-CARON, MARIE-HELENE, PARIS, FRANCE
MALLET, JACQUES, PARIS, FRANCE
PA Rhone-Poulenc Rorer, S.A. (non-U.S. corporation)
PI US 2002006660 A1 20020117
AI US 1997-810315 A1 19970228 (8)
PRAI US 1996-12635P 19960301 (60)

FS APPLICATION
LN.CNT 1048
INCL INCLM: 435/325.000
INCLS: 514/044.000
NCL NCLM: 435/325.000
NCLS: 514/044.000
IC [7]
ICM: C12N005-02
ICS: A61K031-70

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 134 OF 269 USPATFULL on STN
AN 2002:8042 USPATFULL
TI Methods for treating neurological deficits
IN Reid, James Steven, Berkeley, CA, UNITED STATES
Fallon, James H., Irvine, CA, UNITED STATES
PA The Regents of the University of California, a California corporation
(U.S. corporation)
PI US 2002004039 A1 20020110
AI US 2001-920085 A1 20010731 (9)
RLI Continuation of Ser. No. US 1998-129028, filed on 4 Aug 1998, PENDING
PRAI US 1997-55383P 19970804 (60)

DT Utility
FS APPLICATION

LN.CNT 2578
INCL INCLM: 424/093.700
INCLS: 435/368.000
NCL NCLM: 424/093.700
NCLS: 435/368.000
IC [7]
ICM: A61K045-00
ICS: C12N005-08

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 135 OF 269 USPATFULL on STN
AN 2002:340241 USPATFULL
TI Cultures of human CNS neural stem cells
IN Carpenter, Melissa, Foster City, CA, United States
PA Cytotherapeutics, Inc., Lincoln, RI, United States (U.S. corporation)
PI US 6498018 B1 20021224
WO 9911758 19990311
AI US 2000-486302 20001016 (9)
WO 1998-US18597 19980904

20001016 PCT 371 date
RLI Continuation-in-part of Ser. No. US 1997-926313, filed on 5 Sep 1997,
now patented, Pat. No. US 5968829

DT Utility
FS GRANTED

LN.CNT 1113
INCL INCLM: 435/029.000
INCLS: 435/368.000
NCL NCLM: 435/029.000
NCLS: 435/368.000

IC [7]
ICM: C12Q001-02
EXF 435/4; 435/368; 435/6; 435/29; 435/467

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 136 OF 269 USPATFULL on STN
AN 2002:340140 USPATFULL
TI Neural transplantation using proliferated multipotent neural stem cells
and their progeny
IN Weiss, Samuel, Alberta, CANADA
Reynolds, Brent, Alberta, CANADA
Hammang, Joseph P., Barrington, RI, United States
Baetge, E. Edward, Barrington, RI, United States
PA NeuroSpheres Holdings Ltd., Calgary, CANADA (non-U.S. corporation)
PI US 6497872 B1 20021224
AI US 1995-486313 19950607 (8)
RLI Continuation-in-part of Ser. No. US 1994-270412, filed on 5 Jul 1994,
now abandoned Continuation of Ser. No. US 1991-726812, filed on 8 Jul
1991, now abandoned Continuation of Ser. No. US 486313
Continuation-in-part of Ser. No. US 1995-385404, filed on 7 Feb 1995,
now abandoned Continuation of Ser. No. US 1992-961813, filed on 16 Oct
1992, now abandoned Continuation-in-part of Ser. No. US 726812

No. US 1994-359945, filed on 20 Dec 1994, now abandoned Continuation of Ser. No. US 1994-221655, filed on 1 Apr 1994, now abandoned Continuation of Ser. No. US 1992-967622, filed on 28 Oct 1992, now abandoned Continuation-in-part of Ser. No. US 1991-726812, filed on 8 Jul 1991, now abandoned Continuation-in-part of Ser. No. US 486313 Continuation-in-part of Ser. No. US 1995-376062, filed on 20 Jan 1995, now abandoned Continuation of Ser. No. US 1993-10829, filed on 29 Jan 1993, now abandoned Continuation-in-part of Ser. No. US 726812 Continuation-in-part of Ser. No. US 486313 Continuation-in-part of Ser. No. US 1993-149508, filed on 9 Nov 1993, now abandoned Continuation-in-part of Ser. No. US 726812 Continuation-in-part of Ser. No. US 486313 Continuation-in-part of Ser. No. US 1994-311099, filed on 23 Sep 1994, now abandoned Continuation-in-part of Ser. No. US 726812 Continuation-in-part of Ser. No. US 486313 Continuation-in-part of Ser. No. US 1994-338730, filed on 14 Nov 1994, now abandoned Continuation-in-part of Ser. No. US 726812

DT Utility
FS GRANTED
LN.CNT 4223
INCL INCLM: 424/093.100
INCLS: 424/093.200; 424/093.210
NCL NCLM: 424/093.100
NCLS: 424/093.200; 424/093.210
IC [7]
ICM: A01N063-00
ICS: A01N065-00; A61K048-00
EXF 424/93.1; 424/93.2; 424/93.21; 514/44
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 137 OF 269 USPATFULL on STN
AN 2002:275940 USPATFULL
TI Enriched central nervous system stem cell and progenitor cell populations, and methods for identifying, isolating and enriching for such populations
IN Uchida, Nobuko, Palo Alto, CA, United States
Buck, David W., Santa Clara, CA, United States
Weissman, Irving, Redwood City, CA, United States
PA StemCells, Inc., Palo Alto, CA, United States (U.S. corporation)
PI US 6468794 B1 20021022
AI US 1999-422844 19991021 (9)
PRAI US 1999-119725P 19990212 (60)
DT Utility
FS GRANTED
LN.CNT 996
INCL INCLM: 435/368.000
INCLS: 435/343.000
NCL NCLM: 435/368.000
NCLS: 435/343.000
IC [7]
ICM: C12N005-08
EXF 435/332; 435/368; 435/343; 435/335; 424/93.7; 424/140.1; 424/153.1

L5 ANSWER 138 OF 269 USPATFULL on STN
AN 2002:129781 USPATFULL
TI Multipotent neural stem cell cDNA libraries
IN Weiss, Samuel, Calgary, CANADA
Reynolds, Brent, Saltspring, CANADA
PA Neurospheres Holdings Ltd., Calgary, CANADA (non-U.S. corporation)
PI US 6399369 B1 20020604
AI US 1995-484203 19950607 (8)
RLI Continuation-in-part of Ser. No. US 1994-270412, filed on 5 Jul 1994, now abandoned Continuation of Ser. No. US 1991-726812, filed on 8 Jul 1991, now abandoned Continuation-in-part of Ser. No. US 1995-385404, filed on 7 Feb 1995, now abandoned Continuation of Ser. No. US 1992-961813, filed on 16 Oct 1992, now abandoned Continuation-in-part of Ser. No. US 1991-726812, filed on 8 Jul 1991, now abandoned Continuation-in-part of Ser. No. US 1994-359945, filed on 20 Dec 1994, now abandoned Continuation of Ser. No. US 1994-221655, filed on 1 Apr 1994, now abandoned Continuation of Ser. No. US 1992-967622, filed on 28 Oct 1992, now abandoned Continuation-in-part of Ser. No. US 1991-726812, filed on 8 Jul 1991 Continuation-in-part of Ser. No. US 1995-376062, filed on 20 Jan 1995, now abandoned Continuation of Ser. No. US 1993-10829, filed on 29 Jan 1993 Continuation-in-part of Ser. No. US 1991-726812, filed on 8 Jul 1991, now abandoned Continuation-in-part of Ser. No. US 1993-149508, filed on 9 Nov 1993, now abandoned

No. US 1994-311099, filed on 23 Sep 1994, now abandoned
Continuation-in-part of Ser. No. US 726812 Continuation-in-part of Ser.
No. US 1994-338730, filed on 14 Nov 1994, now abandoned
Continuation-in-part of Ser. No. US 1991-726812, filed on 8 Jul 1991,
now abandoned

DT Utility
FS GRANTED
LN.CNT 3847
INCL INCLM: 435/320.100
INCLS: 536/023.500; 536/023.100; 435/368.000; 435/006.000; 435/091.100;
935/080.000
NCL NCLM: 435/320.100
NCLS: 435/006.000; 435/091.100; 435/368.000; 536/023.100; 536/023.500
IC [7]
ICM: C12N015-66
ICS: C12N015-12; C12Q001-68
EXF 536/23.1; 536/23.5; 435/320.1; 435/6; 435/91.1; 435/368; 935/80
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 139 OF 269 USPATFULL on STN
AN 2002:116464 USPATFULL
TI Mx-1 conditionally immortalized cells
IN Hammang, Joseph P., Barrington, RI, United States
Messing, Albee, Madison, WI, United States
PA Neurotech S.A., Evry, FRANCE (non-U.S. corporation)
PI US 6392118 B1 20020521
AI US 1995-447997 19950523 (8)
RLI Division of Ser. No. US 1995-432698, filed on 9 May 1995, now patented,
Pat. No. US 5843431 Continuation-in-part of Ser. No. US 1994-279773,
filed on 20 Jul 1994, now patented, Pat. No. US 5935849
DT Utility
FS GRANTED
LN.CNT 2266
INCL INCLM: 800/014.000
INCLS: 435/320.100; 435/455.000; 435/325.000; 424/093.210; 800/025.000
NCL NCLM: 800/014.000
NCLS: 424/093.210; 435/320.100; 435/325.000; 435/455.000; 800/025.000
IC [7]
ICM: A01K067-027
ICS: C12N005-00; C12N015-00
EXF 435/325; 435/320.1; 435/455; 536/23.72; 536/23.1; 536/24.1; 536/23.51;
536/23.52; 536/23.2; 536/23.5; 935/6; 935/9; 935/11; 935/13; 935/14;
935/15; 935/22; 935/32; 935/66; 935/70; 935/71; 800/2; 800/DIG.1; 800/18
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 140 OF 269 USPATFULL on STN
AN 2002:63733 USPATFULL
TI Neuroepithelial stem cells and glial-restricted intermediate precursors
IN Rao, Mahendra S., Salt Lake City, UT, United States
Mayer-Proschel, Margot, Sandy, UT, United States
PA University of Utah Research Foundation, Salt Lake City, UT, United
States (U.S. corporation)
PI US 6361996 B1 20020326
AI US 1997-852744 19970507 (8)
DT Utility
FS GRANTED
LN.CNT 1491
INCL INCLM: 435/353.000
INCLS: 435/325.000
NCL NCLM: 435/353.000
NCLS: 435/325.000
IC [7]
ICM: C12N005-06
EXF 435/325; 435/368; 435/353
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 141 OF 269 USPATFULL on STN
AN 2002:13912 USPATFULL
TI Human cell lines
IN Stringer, Bradley Michael John, Cardiff, UNITED KINGDOM
PA CellFactors plc, Cambridge, UNITED KINGDOM (non-U.S. corporation)
PI US 6340592 B1 20020122
AI US 2000-694203 20001023 (9)
RLI Division of Ser. No. US 1999-390161, filed on 3 Sep 1999, now patented,
Pat. No. US 6197585 Continuation of Ser. No. US 836440. now abandoned

GB 1995-10555 19950524
DT Utility
FS GRANTED
LN.CNT 932
INCL INCLM: 435/372.000
INCLS: 435/325.000; 435/366.000; 435/375.000; 435/440.000; 435/455.000;
435/467.000; 536/023.100; 536/023.700; 536/023.720
NCL NCLM: 435/372.000
NCLS: 435/325.000; 435/366.000; 435/375.000; 435/440.000; 435/455.000;
435/467.000; 536/023.100; 536/023.700; 536/023.720
IC [7]
ICM: C12N015-85
ICS: C12N015-00; C12N015-11; C07H021-04
EXF 435/6; 435/69.1; 435/91.1; 435/440; 435/455; 435/467; 435/325; 435/366;
435/368; 435/372; 435/375; 435/320.1; 536/23.1; 536/23.7; 536/23.72
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 142 OF 269 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 28
AN 2003:340733 CAPLUS
DN 140:91283
TI Study on culture and differentiation of BMSC from Macaca irus
AU Li, Gang; Ke, Yiquan; Jiang, Xiaodan; Xu, Ruxiang; Wang, Wei; Zou, Yuxi
CS Zhujiang Hospital, First Military Medical University, Canton, 510282,
Peop. Rep. China
SO Jiefangjun Yixue Zazhi (2002), 27(11), 956-958
CODEN: CFCHBN; ISSN: 0577-7402
PB Jenminjun Chubanshe
DT Journal
LA Chinese

L5 ANSWER 143 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 29
AN 2002:402838 BIOSIS
DN PREV200200402838
TI Neurogenic differentiation of murine and human adipose-derived stromal
cells.
AU Safford, Kristine M.; Hicok, Kevin C.; Safford, Shawn D.; Halvorsen,
Yuan-Di C.; Wilkison, William O.; Gimble, Jeffrey M.; Rice, Henry E.
[Reprint author]
CS Department of Surgery, Division of Pediatric Surgery, Duke University
Medical Center, Box 3815, Durham, NC, 27710, USA
rice0017@mc.duke.edu
SO Biochemical and Biophysical Research Communications, (June 7, 2002) Vol.
294, No. 2, pp. 371-379. print.
CODEN: BBRCA9. ISSN: 0006-291X.
DT Article
LA English
ED Entered STN: 24 Jul 2002
Last Updated on STN: 29 Aug 2002

L5 ANSWER 144 OF 269 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS
RESERVED. on STN DUPLICATE 30
AN 2002083839 EMBASE
TI Intrathecal administration of epidermal growth factor and fibroblast
growth factor 2 promotes ependymal proliferation and functional recovery
after spinal cord injury in adult rats.
AU Kojima A.; Tator C.H.
CS Dr. C.H. Tator, Toronto Western Hospital, 399 Bathurst Street, Toronto,
Ont. M5T 2S8, Canada. charles.tator@uhn.on.ca
SO Journal of Neurotrauma, (2002) 19/2 (223-238).
Refs: 66
ISSN: 0897-7151 CODEN: JNEUE4
CY United States
DT Journal; Article
FS 008 Neurology and Neurosurgery
037 Drug Literature Index
LA English
SL English

L5 ANSWER 145 OF 269 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN
DUPLICATE
AN 2002:35102297 BIOTECHNO
TI Human cortical glial tumors contain neural stem-like cells expressing
astroglial and neuronal markers in vitro
AU Ignatova T.N.; Kukekov V.G.; Lavwell E.D.; Suslov O.N.; Vrionis F.N.:

CS Dr. D.A. Steindler, McKnight Brain Institute, Shands Cancer/Prog. Stem
Cell Bio., University of Florida, 100 S. Newell Drive, Gainesville, FL
32610, United States.
E-mail: steindler@mbi.ufl.edu

SO GLIA, (2002), 39/3 (193-206), 66 reference(s)
CODEN: GLIAEJ ISSN: 0894-1491

DT Journal; Article
CY United States
LA English
SL English

L5 ANSWER 146 OF 269 MEDLINE on STN
AN 2002461734 MEDLINE
DN PubMed ID: 12220703
TI Enhanced viability and neuronal differentiation of neural progenitors by
chromaffin cell co-culture.

AU Schumm Michael A; Castellanos Daniel A; Frydel Beata R; Sagen Jacqueline
CS The Miami Project to Cure Paralysis, University of Miami School of
Medicine, Lois Pope Life Center, 1095 NW 14th Terrace (R-48), Miami, FL
33136, USA.

NC NS25054 (NINDS)
SO Brain research. Developmental brain research, (2002 Aug 30) 137 (2)
115-25.
Journal code: 8908639. ISSN: 0165-3806.

CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200211
ED Entered STN: 20020911
Last Updated on STN: 20021214
Entered Medline: 20021126

L5 ANSWER 147 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2002:478638 BIOSIS
DN PREV200200478638
TI A method for clonal analysis of epidermal growth factor-responsive neural
progenitors.

AU Engstrom, Caron M.; Demers, Delia; Dooner, Mark; McAuliffe, Christina;
Benoit, Brian O.; Stencel, Kimberly; Joly, Marguerite; Hulspas, Ruud;
Reilly, Judith L.; Savarese, Todd; Recht, Lawrence D.; Ross, Alonzo H.;
Quesenberry, Peter J. [Reprint author]
CS Department of Neurology and Department of Pharmacology and Molecular
Toxicology, Cancer Center, University of Massachusetts Medical Center,
Worcester, MA, USA
pquesenberry@rwmc.org

SO Journal of Neuroscience Methods, (30 June, 2002) Vol. 117, No. 2, pp.
111-121. print.
CODEN: JNMEDT. ISSN: 0165-0270.

DT Article
LA English
ED Entered STN: 11 Sep 2002
Last Updated on STN: 11 Sep 2002

L5 ANSWER 148 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2002:446135 BIOSIS
DN PREV200200446135
TI Monkey embryonic stem cell-derived embryoid bodies, neural progenitor
cells, and neural phenotypes.

AU Kuo, Hung-Chih [Reprint author]; Pau, K.-Y. Francis [Reprint author];
Mitalipov, Shoukhrat M. [Reprint author]; Okano, Hideyuki; Wolf, Don P.
[Reprint author]
CS Division of Reproductive Sciences, Oregon Regional Primate Research
Center, Oregon Health and Science University, West Campus, Beaverton, OR,
USA

SO Biology of Reproduction, (2002) Vol. 66, No. Supplement 1, pp. 106. print.
Meeting Info.: 35th Annual Meeting of the Society for the Study of
Reproduction. Baltimore, Maryland, USA. July 28-31, 2002.
CODEN: BIREBV. ISSN: 0006-3363.

DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 21 Aug 2002
Last Updated on STN: 21 Aug 2002

AN 2002:548099 CAPLUS
 DN 138:70372
 TI Human neural precursor cells - an in vitro characterization
 AU Mayer-Proschel, Margot; Liu, Ying; Xue, Haipeng; Wu, Yuanyuan; Carpenter, Melissa K.; Rao, Mahendra S.
 CS 601 Elmwood Avenue, Department of Biomedical Genetics, University of Rochester, Box 633, Rochester, NY, 14642, USA
 SO Clinical Neuroscience Research (2002), 2(1-2), 58-69
 CODEN: CNRLBU; ISSN: 1566-2772
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 RE.CNT 75 THERE ARE 75 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 150 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2003:165173 BIOSIS
 DN PREV200300165173
 TI Rat Neural Stem Cells (rNSC) Differentiate in Vitro into Cytokeratin-positive Cells.
 AU Enzmann, V. [Reprint Author]; Howard, R. M.; Whittemore, S. R.; Kaplan, H. J. [Reprint Author]
 CS Ophthalmology, University of Louisville, Louisville, KY, USA
 SO ARVO Annual Meeting Abstract Search and Program Planner, (2002) Vol. 2002, pp. Abstract No. 3691. cd-rom.
 Meeting Info.: Annual Meeting of the Association For Research in Vision and Ophthalmology. Fort Lauderdale, Florida, USA. May 05-10, 2002.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 2 Apr 2003
 Last Updated on STN: 2 Apr 2003

L5 ANSWER 151 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2003:155181 BIOSIS
 DN PREV200300155181
 TI Characterization of Potential Stem Cells From Human Conjunctiva.
 AU Shatos, M. A. [Reprint Author]; Rubin, P.; Chang, E.; Dartt, D. A. [Reprint Author]
 CS Schepens Eye Research Institute, Boston, MA, USA
 SO ARVO Annual Meeting Abstract Search and Program Planner, (2002) Vol. 2002, pp. Abstract No. 3159. cd-rom.
 Meeting Info.: Annual Meeting of the Association For Research in Vision and Ophthalmology. Fort Lauderdale, Florida, USA. May 05-10, 2002.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 26 Mar 2003
 Last Updated on STN: 26 Mar 2003

L5 ANSWER 152 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2003:380099 BIOSIS
 DN PREV200300380099
 TI EXPRESSION OF DIFFERENTIATION ANTIGENS OF ***FGF*** RESPONSE NEURAL STEM CELLS IN ***EGF***
 AU Yamanoha, B. [Reprint Author]; Nakayama, T. [Reprint Author]
 CS Inst Life Sci, Soka Univ, Tokyo 192-8577, Japan
 SO Society for Neuroscience Abstract Viewer and Itinerary Planner, (2002) Vol. 2002, pp. Abstract No. 825.7. <http://sfn.scholarone.com>. cd-rom.
 Meeting Info.: 32nd Annual Meeting of the Society for Neuroscience. Orlando, Florida, USA. November 02-07, 2002. Society for Neuroscience.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 Conference; (Meeting Poster)
 LA English
 ED Entered STN: 20 Aug 2003
 Last Updated on STN: 20 Aug 2003

L5 ANSWER 153 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2003:326068 BIOSIS
 DN PREV200300326068
 TI CULTIVATION AND CHARACTERIZATION OF ADULT HUMAN NEURAL STEM CELLS.
 AU Westerlund, U. [Reprint Author]; Ohlsson, M. [Reprint Author]; Gustavsson, B. [Reprint Author]; Svensson, M. [Reprint Author]
 CS Dept of Neurosurg, Ins of Clinical Neurosci, Stockholm, Sweden

DT Vol. 2002, pp. Abstract No. 726.5. <http://sfn.scholarone.com>. cd-rom.
 LA Meeting Info.: 32nd Annual Meeting of the Society for Neuroscience.
 ED Orlando, Florida, USA. November 02-07, 2002. Society for Neuroscience.
 Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 English
 Entered STN: 16 Jul 2003
 Last Updated on STN: 16 Jul 2003

L5 ANSWER 154 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2003:326074 BIOSIS
 DN PREV200300326074
 TI NEUROSPHERE FORMATION OF NTERA-2 CELLS GROWN IN SERUM-FREE
 MEDIUM:COMPARISON WITH NEUROSPHERES DERIVED FROM MOUSE NEURAL STEM CELLS.
 AU Marchal, S. [Reprint Author]; Deleyrolle, L. [Reprint Author]; Dromard, C.
 [Reprint Author]; De Weille, J. [Reprint Author]; Gaviria, M. A. [Reprint
 Author]; Saunier, M. [Reprint Author]; Privat, A. [Reprint Author];
 Hugnot, J. P. [Reprint Author]
 CS INSERM U336, Montpellier, France
 SO Society for Neuroscience Abstract Viewer and Itinerary Planner, (2002)
 Vol. 2002, pp. Abstract No. 726.12. <http://sfn.scholarone.com>. cd-rom.
 Meeting Info.: 32nd Annual Meeting of the Society for Neuroscience.
 Orlando, Florida, USA. November 02-07, 2002. Society for Neuroscience.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 16 Jul 2003
 Last Updated on STN: 16 Jul 2003

L5 ANSWER 155 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2003:315346 BIOSIS
 DN PREV200300315346
 TI TRANSDIFFERENTIATION OF BONE MARROW STROMAL CELLS INTO NEURON - LIKE
 CELLS.
 AU Sanchez-Ramos, J. [Reprint Author]; Song, S. [Reprint Author]; Kamath, T.
 [Reprint Author]; Mosquera, D. [Reprint Author]; DeMesquita, D. [Reprint
 Author]; Zigova, T.
 CS Neurology, Neurosurgery, Center for Aging and Brain Repair, University of
 South Florida, Tampa, FL, USA
 SO Society for Neuroscience Abstract Viewer and Itinerary Planner, (2002)
 Vol. 2002, pp. Abstract No. 618.10. <http://sfn.scholarone.com>. cd-rom.
 Meeting Info.: 32nd Annual Meeting of the Society for Neuroscience.
 Orlando, Florida, USA. November 02-07, 2002. Society for Neuroscience.
 DT Conference; (Meeting)
 Conference; (Meeting Poster)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 9 Jul 2003
 Last Updated on STN: 9 Jul 2003

L5 ANSWER 156 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2003:305320 BIOSIS
 DN PREV200300305320
 TI ABERRANT GROWTH AND DIFFERENTIATION OF CNS GLIAL PROGENITORS IN
 NEUROFIBROMATOSIS TYPE 1 MUTANTS.
 AU Bennett, M. R. [Reprint Author]; Rizvi, T. A.; Karyala, S.; McKinnon, R.
 D.; Ratner, N.
 CS Neuroscience Graduate Program, University of Cincinnati College of
 Medicine, Cincinnati, OH, USA
 SO Society for Neuroscience Abstract Viewer and Itinerary Planner, (2002)
 Vol. 2002, pp. Abstract No. 524.10. <http://sfn.scholarone.com>. cd-rom.
 Meeting Info.: 32nd Annual Meeting of the Society for Neuroscience.
 Orlando, Florida, USA. November 02-07, 2002. Society for Neuroscience.
 DT Conference; (Meeting)
 Conference; (Meeting Poster)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 2 Jul 2003
 Last Updated on STN: 2 Jul 2003

L5 ANSWER 157 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2003:303866 BIOSIS
 DN PREV200300303866
 TI BASIC ***FGF*** STIMULATES PROLIFERATION OF NEURONAL PRECURSORS IN
 HIPPOCAMPAL PROGENITOR CELL CULTURES.

CS [Reprint Author]; Mattson, M. P. [Reprint Author]
 SO Natl Inst Aging (NIH), Baltimore, MD, USA
 Society for Neuroscience Abstract Viewer and Itinerary Planner, (2002)
 Vol. 2002, pp. Abstract No. 421.4. <http://sfn.scholarone.com.cd-rom>.
 Meeting Info.: 32nd Annual Meeting of the Society for Neuroscience.
 Orlando, Florida, USA. November 02-07, 2002. Society for Neuroscience.
 DT Conference; (Meeting)
 Conference; (Meeting Poster)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 2 Jul 2003
 Last Updated on STN: 2 Jul 2003

L5 ANSWER 158 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2003:268093 BIOSIS
 DN PREV200300268093
 TI GENERATION OF RADIAL GLIA IN THE ADULT FOREBRAIN.
 AU Gregg, C. T. [Reprint Author]; Weiss, S. [Reprint Author]
 CS Genes and Dev Res Grp, Univ Calgary, Calgary, AB, Canada
 SO Society for Neuroscience Abstract Viewer and Itinerary Planner, (2002)
 Vol. 2002, pp. Abstract No. 25.3. <http://sfn.scholarone.com.cd-rom>.
 Meeting Info.: 32nd Annual Meeting of the Society for Neuroscience.
 Orlando, Florida, USA. November 02-07, 2002. Society for Neuroscience.
 DT Conference; (Meeting)
 Conference; (Meeting Poster)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 11 Jun 2003
 Last Updated on STN: 11 Jun 2003

L5 ANSWER 159 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2003:267810 BIOSIS
 DN PREV200300267810
 TI DIFFERENTIATION OF NEURAL PRECURSORS FROM RHESUS MONKEY EMBRYONIC STEM
 CELLS.
 AU Piscitelli, G. M. [Reprint Author]; Zhang, S. C. [Reprint Author]
 CS Neuroscience Training Program, Anatomy, Neurology, Waisman Center, Univ
 Wisconsin Madison, Madison, WI, USA
 SO Society for Neuroscience Abstract Viewer and Itinerary Planner, (2002)
 Vol. 2002, pp. Abstract No. 7.5. <http://sfn.scholarone.com.cd-rom>.
 Meeting Info.: 32nd Annual Meeting of the Society for Neuroscience.
 Orlando, Florida, USA. November 02-07, 2002. Society for Neuroscience.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 11 Jun 2003
 Last Updated on STN: 11 Jun 2003

L5 ANSWER 160 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2003:336377 BIOSIS
 DN PREV200300336377
 TI Ex Vivo Differentiation of Mouse Multipotent Adult Progenitor Cells
 (mMAPC) into Functional Dopaminergic Neurons.
 AU Jiang, Yuehua [Reprint Author]; Henderson, Dori [Reprint Author];
 Blackstedt, Mark [Reprint Author]; Chen, Angel [Reprint Author]; Lisberg,
 Aaron [Reprint Author]; Miller, Robert F. [Reprint Author]; Verfaillie,
 Catherine M. [Reprint Author]
 CS Stem Cell Institute and Department of Medicine, University of Minnesota,
 Minneapolis, MN, USA
 SO Blood, (November 16 2002) Vol. 100, No. 11, pp. Abstract No. 95. print.
 Meeting Info.: 44th Annual Meeting of the American Society of Hematology.
 Philadelphia, PA, USA. December 06-10, 2002. American Society of
 Hematology.
 CODEN: BLOOAW. ISSN: 0006-4971.
 DT Conference; (Meeting)
 Conference; (Meeting Poster)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 23 Jul 2003
 Last Updated on STN: 23 Jul 2003

L5 ANSWER 161 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2003:336715 BIOSIS
 DN PREV200300336715
 TI Expression of Neuron Specific Markers on Human Marrow Derived Mesenchymal

AU Tondreau, Tatiana [Reprint Author]; Lagneaux, Laurence [Reprint Author];
 CS Delforge, Alain [Reprint Author]; Bron, Dominique [Reprint Author]
 Laboratory of Experimental Hematology, J. Bordet Institute, Brussels,
 Belgium
 SO Blood, (November 16 2002) Vol. 100, No. 11, pp. Abstract No. 2017. print.
 Meeting Info.: 44th Annual Meeting of the American Society of Hematology.
 Philadelphia, PA, USA. December 06-10, 2002. American Society of
 Hematology.
 CODEN: BLOOAW. ISSN: 0006-4971.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 Conference; (Meeting Poster)
 LA English
 ED Entered STN: 23 Jul 2003
 Last Updated on STN: 23 Jul 2003

L5 ANSWER 162 OF 269 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 32
 AN 2001:597812 CAPLUS
 DN 135:164458
 TI Isolation and transplantation of retinal stem cells
 IN Young, Michael J.; Klassen, Henry; Shatos, Marie A.; Mizumoto, Keiko
 PA Schepens Eye Research Institute, Inc., USA
 SO PCT Int. Appl., 56 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001058460	A1	20010816	WO 2001-US4419	20010212
W: AU, CA, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
EP 1261357	A1	20021204	EP 2001-907195	20010212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
JP 2003521910	T2	20030722	JP 2001-557570	20010212
US 2003207450	A1	20031106	US 2002-203105	20020806
PRAI US 2000-181723P	P	20000211		
WO 2001-US4419	W	20010212		

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 163 OF 269 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 33
 AN 2001:320076 CAPLUS
 DN 134:323129
 TI Cultures of ***GFAP*** + ***nestin*** + cells that differentiate to
 neurons
 IN Wahlberg, Lars; Campbell, Kenneth; Fagerstrom, Charlotta; Eriksson,
 Cecelia; Wictorin, Klas
 PA Ns Gene A/s, Den.
 SO PCT Int. Appl., 64 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001030981	A1	20010503	WO 2000-IB1669	20001025
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1228195	A1	20020807	EP 2000-973148	20001025
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
PRAI US 1999-161316P	P	19991025		
WO 2000-IB1669	W	20001025		

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 164 OF 269 USPATFULL on STN DUPLICATE 34
 AN 2001:211931 USPATFULL
 TI Mx-1 conditionally immortalized cells
 IN Schinstine, Malcolm, Ben Salem, PA, United States
 Shoichet, Molly S., Toronto, Canada
 Gentile, Frank T., Warwick, RI, United States
 Hammang, Joseph P., Barrington, RI, United States
 Holland, Laura M., Horsham, PA, United States
 Cain, Brian M., Everett, MA, United States
 Doherty, Edward J., Mansfield, MA, United States
 Winn, Shelley R., Smithfield, RI, United States
 Aebischer, Patrick, Lutry, Switzerland
 PI US 2001043923 A1 20011122
 US 6495364 B2 20021217
 AI US 2001-801237 A1 20010307 (9)
 RLI Continuation of Ser. No. US 1995-447997, filed on 23 May 1995, PENDING
 DT Utility
 FS APPLICATION
 LN.CNT 2069
 INCL INCLM: 424/093.210
 NCL NCLM: 435/320.100
 NCLS: 424/093.200; 435/325.000; 435/455.000; 514/044.000
 IC [7]
 ICM: A61K048-00
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 165 OF 269 USPATFULL on STN DUPLICATE 35
 AN 2001:188429 USPATFULL
 TI Methods for isolation and activation of, and control of differentiation
 from, stem and progenitor cells
 IN Csete, Marie, South Pasadena, CA, United States
 Doyle, John, South Pasadena, CA, United States
 Wold, Barbara, San Marino, CA, United States
 PA California Institute of Technology (U.S. corporation)
 PI US 2001034061 A1 20011025
 US 6589728 B2 20030708
 AI US 2001-773824 A1 20010131 (9)
 RLI Division of Ser. No. US 1998-195569, filed on 18 Nov 1998, GRANTED, Pat.
 No. US 6184035
 DT Utility
 FS APPLICATION
 LN.CNT 1176
 INCL INCLM: 435/377.000
 INCLS: 435/455.000; 435/004.000
 NCL NCLM: 435/004.000
 NCLS: 435/375.000; 435/377.000
 IC [7]
 ICM: C12Q001-00
 ICS: C12N005-08; C12N015-63; C12N015-85
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 166 OF 269 USPATFULL on STN
 AN 2001:237692 USPATFULL
 TI Use of collagenase in the preparation of neural stem cell cultures
 IN Uchida, Nobuko, Palo Alto, CA, United States
 PI US 2001055808 A1 20011227
 AI US 2001-867330 A1 20010529 (9)
 RLI Continuation of Ser. No. US 1999-258529, filed on 26 Feb 1999, UNKNOWN
 DT Utility
 FS APPLICATION
 LN.CNT 718
 INCL INCLM: 435/368.000
 NCL NCLM: 435/368.000
 IC [7]
 ICM: C12N005-08
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 167 OF 269 USPATFULL on STN
 AN 2001:223926 USPATFULL
 TI Human cell-lines
 IN Stringer, Bradley Michael John, Cyncoed, Great Britain
 PI US 2001049143 A1 20011206
 AI US 2001-837561 A1 20010418 (9)
 RLI Continuation of Ser. No. US 2000-693597, filed on 20 Oct 2000, PENDING
 PRAI GB 1994-22523 19941108

DT Utility
FS APPLICATION
LN.CNT 928
INCL INCLM: 435/455.000
INCLS: 435/456.000; 435/366.000
NCL NCLM: 435/455.000
NCLS: 435/456.000; 435/366.000
IC [7]
ICM: C12N015-86
ICS: C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 168 OF 269 USPATFULL on STN
AN 2001:212128 USPATFULL
TI Enriched central nervous system stem cell and progenitor cell
populations, and methods for identifying, isolating and enriching for
such populations
IN Buck, David W., Heathfield, Great Britain
Uchida, Nobuko, Palo Alto, CA, United States
Weissman, Irving, Redwood City, CA, United States
PI US 2001044122 A1 20011122
AI US 2001-792098 A1 20010223 (9)
RLI Continuation-in-part of Ser. No. US 1999-422844, filed on 21 Oct 1999,
PENDING
PRAI US 1999-119725P 19990212 (60)
DT Utility
FS APPLICATION
LN.CNT 1357
INCL INCLM: 435/007.210
INCLS: 435/368.000
NCL NCLM: 435/007.210
NCLS: 435/368.000
IC [7]
ICM: G01N033-567
ICS: C12N005-08

L5 ANSWER 169 OF 269 USPATFULL on STN
AN 2001:188204 USPATFULL
TI Pleuripotent stem cells generated from adipose tissue-derived stroma
cells and uses thereof
IN Wilkison, William O., Bahama, NC, United States
Gimble, Jeffrey, Chapel Hill, NC, United States
PI US 2001033834 A1 20011025
AI US 2001-793173 A1 20010226 (9)
PRAI US 2000-185338P 20000226 (60)
DT Utility
FS APPLICATION
LN.CNT 1236
INCL INCLM: 424/093.700
INCLS: 424/093.210; 435/325.000; 435/366.000; 435/368.000; 435/372.000
NCL NCLM: 424/093.700
NCLS: 424/093.210; 435/325.000; 435/366.000; 435/368.000; 435/372.000
IC [7]
ICM: A61K048-00
ICS: A01N063-00; A01N065-00; C12N005-00; C12N005-02; C12N005-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 170 OF 269 USPATFULL on STN
AN 2001:176389 USPATFULL
TI Lineage restricted glial precursors from the central nervous system
IN Rao, Mahendra S., Salt Lake City, UT, United States
Noble, Mark, Brighton, NY, United States
Mayer-Proschel, Margot, Pittsford, NY, United States
PI US 2001029045 A1 20011011
AI US 2001-736728 A1 20010316 (9)
RLI Continuation of Ser. No. US 1997-980850, filed on 29 Nov 1997, GRANTED,
Pat. No. US 6235527
DT Utility
FS APPLICATION
LN.CNT 1440
INCL INCLM: 435/325.000
INCLS: 424/093.700
NCL NCLM: 435/325.000
NCLS: 424/093.700
IC [7]

ICS: C12N005-06

L5 ANSWER 171 OF 269 USPATFULL on STN
AN 2001:109775 USPATFULL
TI Compositions and methods for manipulating glial progenitor cells and
treating neurological deficits
IN Reid, James Steven, Berkeley, CA, United States
Fallon, James H., Irvine, CA, United States
PI US 2001007657 A1 20010712
AI US 2000-739933 A1 20001218 (9)
RLI Continuation-in-part of Ser. No. US 1998-129028, filed on 4 Aug 1998,
PENDING
PRAI US 1997-55383P 19970804 (60)
DT Utility
FS APPLICATION
LN.CNT 3303
INCL INCLM: 424/093.700
NCL NCLM: 424/093.700
IC [7]
ICM: A01N063-00
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 172 OF 269 USPATFULL on STN
AN 2001:89522 USPATFULL
TI Neural transplantation using pluripotent neuroepithelial cells
IN Sinden, John, London, Great Britain
Gray, Jeffrey A., London, Great Britain
Hodges, Helen, London, Great Britain
Kershaw, Timothy, London, Great Britain
Rashid-Doubell, Fiza, Oxford, Great Britain
PI US 2001001662 A1 20010524
AI US 2001-760274 A1 20010112 (9)
RLI Continuation of Ser. No. US 2000-672606, filed on 28 Sep 2000, UNKNOWN
PRAI GB 1995-18606 19950912
DT Utility
FS APPLICATION
LN.CNT 1036
INCL INCLM: 424/093.210
INCL INCLM: 424/093.700
NCL NCLM: 424/093.210
NCL NCLM: 424/093.700
IC [7]
ICM: A61K048-00
ICS: A01N063-00
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 173 OF 269 USPATFULL on STN
AN 2001:163016 USPATFULL
TI Use of multipotent neural stem cells and their progeny for the screening
of drugs and other biological agents
IN Weiss, Samuel, Calgary, Canada
Reynolds, Brent, Calgary, Canada
Hammang, Joseph P., Barrington, RI, United States
Baetge, E. Edward, Barrington, RI, United States
PA Neurospheres Holdings, Ltd., Alberta, Canada (non-U.S. corporation)
PI US 6294346 B1 20010925
AI US 1995-484406 19950607 (8)
RLI Continuation-in-part of Ser. No. US 1995-385404, filed on 7 Feb 1995,
now abandoned, said Ser. No. US 484406 And Ser. No. US 1995-376062,
filed on 20 Jan 1995, now abandoned, said Ser. No. US 484406 And Ser.
No. US 1994-359945, filed on 20 Dec 1994, now abandoned, said Ser. No.
US 484406 And Ser. No. US 1994-338730, filed on 14 Nov 1994, now
abandoned, said Ser. No. US 484406 And Ser. No. US 1994-311099, filed
on 23 Sep 1994, now abandoned, said Ser. No. US 484406 And Ser. No. US
1994-270412, filed on 5 Jul 1994, now abandoned, said Ser. No. US
484406 And Ser. No. US 1993-149508, filed on 9 Nov 1993, now abandoned
Continuation-in-part of Ser. No. US 1991-726812, filed on 8 Jul 1991,
now abandoned Continuation of Ser. No. US 1992-961813, filed on 16 Oct
1992, now abandoned Continuation-in-part of Ser. No. US 726812
Continuation of Ser. No. US 1993-10829, filed on 29 Jan 1993, now
abandoned Continuation-in-part of Ser. No. US 726812 Continuation of
Ser. No. US 1994-221655, filed on 1 Apr 1994, now abandoned Continuation
of Ser. No. US 1992-967622, filed on 28 Oct 1992, now abandoned
Continuation-in-part of Ser. No. US 726812, said Ser. No. US 338730
Continuation-in-part of Ser. No. US 726812, said Ser. No. US 311099

Continuation-in-part of Ser. No. US 726812
DT Utility
FS GRANTED
LN.CNT 4153
INCL INCLM: 435/007.210
INCLS: 435/368.000; 435/377.000; 435/375.000
NCL NCLM: 435/007.210
NCLS: 435/368.000; 435/375.000; 435/377.000
IC [7]
ICM: G01N033-554
ICS: C12N005-00
EXF 435/7.21; 435/368; 435/378; 435/377; 435/375
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 174 OF 269 USPATFULL on STN
AN 2001:125969 USPATFULL
TI Cancer treatment by expression of differentiation factor receptor
IN Ross, Alonzo H., Shrewsbury, MA, United States
Recht, Lawrence D., Holden, MA, United States
Lachyankar, Mahesh B., Shrewsbury, MA, United States
PA University of Massachusetts Medical Center, Worcester, MA, United States
(U.S. corporation)
Worcester Foundation for Biomedical Research, Shrewsbury, MA, United
States (U.S. corporation)
PI US 6271205 B1 20010807
AI US 1997-815795 19970312 (8)
RLI Continuation-in-part of Ser. No. US 1994-310287, filed on 21 Sep 1994,
now patented, Pat. No. US 5789187
PRAI US 1996-14466P 19960321 (60)
DT Utility
FS GRANTED
LN.CNT 1270
INCL INCLM: 514/044.000
INCLS: 435/320.100
NCL NCLM: 514/044.000
NCLS: 435/320.100
IC [7]
ICM: A61K031-711
ICS: C12N015-63
EXF 435/320.1; 435/172.1; 435/455; 424/93.2; 424/93.6; 424/93.21; 514/44
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 175 OF 269 USPATFULL on STN
AN 2001:116781 USPATFULL
TI Method for production of neuroblasts
IN Gage, Fred H., La Jolla, CA, United States
Ray, Jasodhara, San Diego, CA, United States
PA The Regents of the University of California, Oakland, CA, United States
(U.S. corporation)
PI US 6265175 B1 20010724
AI US 1997-884427 19970627 (8)
RLI Continuation of Ser. No. US 1995-445075, filed on 19 May 1995, now
abandoned Division of Ser. No. US 1993-147843, filed on 3 Nov 1993, now
patented, Pat. No. US 5766948 Continuation-in-part of Ser. No. US
1993-1543, filed on 6 Jan 1993, now abandoned
DT Utility
FS GRANTED
LN.CNT 1506
INCL INCLM: 435/007.210
INCLS: 435/007.100; 435/007.200; 435/004.000; 435/029.000
NCL NCLM: 435/007.210
NCLS: 435/004.000; 435/007.100; 435/007.200; 435/029.000
IC [7]
ICM: C12Q001-02
ICS: G01N033-53
EXF 435/7.1; 435/7.2; 435/7.21; 435/4; 435/29

L5 ANSWER 176 OF 269 USPATFULL on STN
AN 2001:107439 USPATFULL
TI Porcine neural cells and their use in treatment of neurological deficits
due to neurodegenerative diseases
IN Isacson, Ole, Cambridge, MA, United States
Dinsmore, Jonathan, Brookline, MA, United States
PA Diacrin, Inc., Charlestown, MA, United States (U.S. corporation)
PI US 6258353 B1 20010710

RLI Continuation-in-part of Ser. No. US 1995-424851, filed on 19 Apr 1995
Continuation-in-part of Ser. No. US 1994-336856, filed on 8 Nov 1994,
now abandoned
DT Utility
FS GRANTED
LN.CNT 5157
INCL INCLM: 424/093.100
INCLS: 424/093.700; 424/130.100; 424/143.100; 424/809.000; 435/325.000;
435/368.000
NCL NCLM: 424/093.100
NCLS: 424/093.700; 424/130.100; 424/143.100; 424/809.000; 435/325.000;
435/368.000
IC [7]
ICM: A01N003-00
ICS: C12N015-85; C12N015-86; A61K039-395
EXF 424/93.7; 424/93.1; 424/130.1; 424/143.1; 424/809; 435/325; 435/368
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 177 OF 269 USPATFULL on STN
AN 2001:86268 USPATFULL
TI Human embryonic germ cell line and methods of use
IN Gearhart, John D., Baltimore, MD, United States
Shamblott, Michael Joseph, Baltimore, MD, United States
PA The Johns Hopkins University School of Medicine, Baltimore, MD, United
States (U.S. corporation)
PI US 6245566 B1 20010612
AI US 1998-52772 19980331 (9)
RLI Continuation-in-part of Ser. No. US 1997-989744, filed on 12 Dec 1997
Continuation-in-part of Ser. No. US 1997-829372, filed on 31 Mar 1997
DT Utility
FS GRANTED
LN.CNT 1916
INCL INCLM: 435/384.000
INCLS: 435/383.000; 435/366.000
NCL NCLM: 435/384.000
NCLS: 435/366.000; 435/383.000
IC [7]
ICM: C12N005-02
ICS: C12N005-00; C12N005-08
EXF 435/383; 435/384; 435/366; 435/372
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 178 OF 269 USPATFULL on STN
AN 2001:78948 USPATFULL
TI Use of collagenase in the preparation of neural stem cell cultures
IN Uchida, Nobuko, Palo Alto, CA, United States
PA StemCells, Inc., Sunnyvale, CA, United States (U.S. corporation)
PI US 6238922 B1 20010529
AI US 1999-258529 19990226 (9)
DT Utility
FS Granted
LN.CNT 701
INCL INCLM: 435/380.000
INCLS: 435/381.000; 435/378.000; 435/368.000
NCL NCLM: 435/380.000
NCLS: 435/368.000; 435/378.000; 435/381.000
IC [7]
ICM: C12N005-02
EXF 435/368; 435/378; 435/380; 435/381
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 179 OF 269 USPATFULL on STN
AN 2001:75180 USPATFULL
TI Lineage restricted glial precursors from the central nervous system
IN Rao, Mahendra S., Salt Lake City, UT, United States
Noble, Mark, Sandy, UT, United States
Mayer-Proschel, Margot, Sandy, UT, United States
PA University of Utah Research Foundation, Salt Lake City, UT, United
States (U.S. corporation)
PI US 6235527 B1 20010522
AI US 1997-980850 19971129 (8)
DT Utility
FS Granted
LN.CNT 1297
INCL INCLM: 435/325.000

NCL NCLM: 435/325.000
NCLS: 435/368.000; 435/378.000; 435/395.000; 435/402.000
IC [7]
ICM: C12N005-06
ICS: C12N005-08
EXF 435/325; 435/368; 435/378; 435/395; 435/402; 424/93.21

L5 ANSWER 180 OF 269 USPATFULL on STN
AN 2001:33082 USPATFULL
TI Human cell-lines
IN Stringer, Bradley Michael John, Cardiff, United Kingdom
PA CellFactors plc, Cambridge, United Kingdom (non-U.S. corporation)
PI US 6197585 B1 20010306
AI US 1999-390161 19990903 (9)
RLI Continuation of Ser. No. US 836440, now abandoned
PRAI GB 1994-22523 19941108
GB 1995-10555 19950524
DT Utility
FS Granted
LN.CNT 934
INCL INCLM: 435/368.000
INCLS: 435/325.000; 435/366.000; 435/375.000; 435/440.000; 435/455.000;
435/467.000; 536/023.100; 536/023.700; 536/023.720
NCL NCLM: 435/368.000
NCLS: 435/325.000; 435/366.000; 435/375.000; 435/440.000; 435/455.000;
435/467.000; 536/023.100; 536/023.700; 536/023.720
IC [7]
ICM: C12N015-85
ICS: C12N015-00; C12N015-11; C07H021-04
EXF 435/6; 435/69.1; 435/91.1; 435/440; 435/455; 435/325; 435/366; 435/368;
435/372; 435/375; 435/320.1; 435/467; 536/23.1; 536/23.72; 536/23.7
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 181 OF 269 USPATFULL on STN
AN 2001:18282 USPATFULL
TI Methods for isolation and activation of, and control of differentiation
from, skeletal muscle stem or progenitor cells
IN Csete, Marie, South Pasadena, CA, United States
Doyle, John, South Pasadena, CA, United States
Wold, Barbara, San Marino, CA, United States
PA California Institute of Technology, Pasadena, CA, United States (U.S.
corporation)
PI US 6184035 B1 20010206
AI US 1998-195569 19981118 (9)
DT Utility
FS Granted
LN.CNT 1223
INCL INCLM: 435/377.000
INCLS: 435/375.000
NCL NCLM: 435/377.000
NCLS: 435/375.000
IC [7]
ICM: C12N005-00
EXF 435/375; 435/377
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 182 OF 269 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
AN 2001-582442 [65] WPIDS
DNC C2001-172762
TI Preparing undifferentiated human embryonic stem cells for differentiation
into neural progenitor cells, involves culturing inner cell mass removed
in vitro fertilized human embryo under specific conditions.
DC B04 D16
IN HUR-BEN, T; PERA, M F; REUBINOFF, B E; BEN-HUR, T
PA (HADA-N) HADASIT MEDICAL RES SERVICES & DEV; (REUB-I) REUBINOFF B E;
(MONU) UNIV MONASH; (UYSI-N) UNIV SINGAPORE NAT; (ESCE-N) ES CELL INT PTE
LTD; (BENH-I) BEN-HUR T; (PERA-I) PERA M F; (REUB-N) REUBINOFF
CYC 95
PI WO 2001068815 A1 20010920 (200165)* EN 125p C12N005-08
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM
DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE
SG SI SK SI TJ TM TR TT TZ UA UG US VJ VN YU ZA ZW

US 2002068045 A1 20020606 (200241) A61K045-00
 US 2002164308 A1 20021107 (200275) C12N005-08
 EP 1263932 A1 20021211 (200301) EN C12N005-08
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
 RO SE SI TR
 EP 1302536 A2 20030416 (200328)# EN C12N005-08
 R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LT LU LV MC
 MK NL PT RO SE SI SK TR
 CA 2406610 A1 20030404 (200336)# EN C12N005-08
 JP 2004500103 W 20040108 (200410) 181p C12N005-06
 ADT WO 2001068815 A1 WO 2001-AU278 20010314; AU 2001040361 A AU 2001-40361
 20010314; US 2002068045 A1 US 2001-808382 20010314; US 2002164308 A1 CIP
 of US 2001-808382 20010314, US 2001-970543 20011004; EP 1263932 A1 EP
 2001-911277 20010314, WO 2001-AU278 20010314; EP 1302536 A2 EP 2002-256974
 20021004; CA 2406610 A1 CA 2002-2406610 20021003; JP 2004500103 W JP
 2001-567299 20010314, WO 2001-AU278 20010314
 FDT AU 2001040361 A Based on WO 2001068815; EP 1263932 A1 Based on WO
 2001068815; JP 2004500103 W Based on WO 2001068815
 PRAI AU 2001-2920 20010206; AU 2000-6211 20000314; AU 2000-1279
 20001106; EP 2002-256974 20021004; CA 2002-2406610 20021003
 IC ICM A61K045-00; C12N005-06; C12N005-08
 ICS A61K035-28; A61K035-30; A61K048-00; A61P009-00; A61P017-02;
 A61P025-00; A61P025-28; A61P037-00; A61P043-00; C12N005-10

 L5 ANSWER 183 OF 269 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 AN 2001-432908 [46] WPIDS
 CR 2001-432907 [46]
 DNC C2001-131018
 TI Producing neuroectoderm cells for treatment of Parkinson's and Alzheimer's
 and for transplantation comprises culturing early primitive ectoderm-like
 cells in conditioned medium.
 DC B04 D16 D22
 IN RATHJEN, J; RATHJEN, P D
 PA (BRES-N) BRESAGEN LTD; (RATH-I) RATHJEN J; (RATH-I) RATHJEN P D
 CYC 95
 PI WO 2001051611 A1 20010719 (200146)* EN 91p C12N005-06
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
 NL OA PT SD SE SL SZ TR TZ UG ZW
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM
 DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC
 LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE
 SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
 AU 2001026544 A 20010724 (200166) C12N005-06
 EP 1254211 A1 20021106 (200281) EN C12N005-06
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
 RO SE SI TR
 US 2003134413 A1 20030717 (200348) C12N005-08
 ADT WO 2001051611 A1 WO 2001-AU30 20010112; AU 2001026544 A AU 2001-26544
 20010112; EP 1254211 A1 EP 2001-901033 20010112, WO 2001-AU30 20010112; US
 2003134413 A1 WO 2001-AU30 20010112, US 2002-181359 20021203
 FDT AU 2001026544 A Based on WO 2001051611; EP 1254211 A1 Based on WO
 2001051611
 PRAI AU 2000-7143 20000427; AU 2000-5098 20000114; AU 2000-7045
 20000420
 IC ICM C12N005-06; C12N005-08
 ICS C12N005-08

 L5 ANSWER 184 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2002:3959 BIOSIS
 DN PREV200200003959
 TI Induction of neuronal phenotype markers on a glioblastoma line using
 enriched media and growth factors stimulation.
 AU Norton, N. S. [Reprint author]; El Refaey, H.; Rodriguez-Sierra, J. F.;
 Heidrick, M. L.; Ebadi, M.; Ahmad, I.
 CS Dept. Oral Biol., Creighton Univ, Omaha, NE, USA
 SO Society for Neuroscience Abstracts, (2001) Vol. 27, No. 2, pp. 2384.
 print.
 Meeting Info.: 31st Annual Meeting of the Society for Neuroscience. San
 Diego, California, USA. November 10-15, 2001.
 ISSN: 0190-5295.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 28 Dec 2001
 Last Updated on STN: 25 Feb 2002

L5 ANSWER 185 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2002:2475 BIOSIS
 DN PREV200200002475
 TI Gene expression analysis of human neural stem cell line differentiation
 into neural lineages.
 AU Shirley, J. S. [Reprint author]; Pattee, P. [Reprint author]; Mathews, R.
 [Reprint author]; Back, S. A. [Reprint author]; Kim, S. U.; Nagalla, S. R.
 [Reprint author]
 CS Pediatrics, Oregon Health Sciences University, Portland, OR, USA
 SO Society for Neuroscience Abstracts, (2001) Vol. 27, No. 2, pp. 2089.
 print.
 Meeting Info.: 31st Annual Meeting of the Society for Neuroscience. San
 Diego, California, USA. November 10-15, 2001.
 ISSN: 0190-5295.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 28 Dec 2001
 Last Updated on STN: 25 Feb 2002

L5 ANSWER 186 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2001:574390 BIOSIS
 DN PREV200100574390
 TI Neural precursor cells in the peripheral nervous system.
 AU Gray, R. A. [Reprint author]; Han, Y.; Bell, T.; Magnuson, D. S. K.
 [Reprint author]
 CS Dept Anatomical Sci and Neurobiol, Univ Louisville, Louisville, KY, USA
 SO Society for Neuroscience Abstracts, (2001) Vol. 27, No. 2, pp. 2045.
 print.
 Meeting Info.: 31st Annual Meeting of the Society for Neuroscience. San
 Diego, California, USA. November 10-15, 2001.
 ISSN: 0190-5295.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 12 Dec 2001
 Last Updated on STN: 25 Feb 2002

L5 ANSWER 187 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2001:261482 BIOSIS
 DN PREV200100261482
 TI In vivo induction of neurogenesis in the adult mammalian forebrain.
 AU Kinyamu, Richard Mutembei [Reprint author]; Opole, Rebecca Wangechi
 [Reprint author]; Opole, Isaac Ogwel [Reprint author]; Fallon, James Harry
 [Reprint author]
 CS University of California, Irvine, 364 MS II, Irvine, CA, 92697-1275, USA
 SO FASEB Journal, (March 8, 2001) Vol. 15, No. 5, pp. A1074. print.
 Meeting Info.: Annual Meeting of the Federation of American Societies for
 Experimental Biology on Experimental Biology 2001. Orlando, Florida, USA.
 March 31-April 04, 2001.
 CODEN: FAJOEC. ISSN: 0892-6638.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 30 May 2001
 Last Updated on STN: 19 Feb 2002

L5 ANSWER 188 OF 269 MEDLINE on STN
 AN 2001268034 MEDLINE
 DN PubMed ID: 11358480
 TI Generation of regionally specified neurons in expanded glial cultures
 derived from the mouse and human lateral ganglionic eminence.
 AU Skogh C; Eriksson C; Kokaia M; Meijer X C; Wahlberg L U; Wictorin K;
 Campbell K
 CS Division of Neurobiology, Wallenberg Neuroscience Center, Lund University,
 Solvegatan 17, BMC A11, S-221 84 Lund, Sweden.
 SO Molecular and cellular neurosciences, (2001 May) 17 (5) 811-20.
 Journal code: 9100095. ISSN: 1044-7431.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 200108
 ED Entered STN: 20010813
 Last Updated on STN: 20010813

L5 ANSWER 189 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 DUPLICATE 36
 AN 2001:272311 BIOSIS
 DN PREV200100272311
 TI Differential cellular accumulation of connective tissue growth factor
 defines a subset of reactive astrocytes, invading fibroblasts, and
 endothelial cells following central nervous system injury in rats and
 humans.
 AU Schwab, Jan Markus [Reprint author]; Beschorner, Rudi; Nguyen, Thai Dung;
 Meyermann, Richard; Schluesener, Hermann J.
 CS Institute of Brain Research, University of Tuebingen Medical School,
 Calwer Str. 3, D-72076, Tuebingen, Germany
 jmschwab@med.uni-tuebingen.de
 SO Journal of Neurotrauma, (April, 2001) Vol. 18, No. 4, pp. 377-388. print.
 ISSN: 0897-7151.
 DT Article
 LA English
 ED Entered STN: 6 Jun 2001
 Last Updated on STN: 19 Feb 2002

L5 ANSWER 190 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2001:486840 BIOSIS
 DN PREV200100486840
 TI Neurospheres contain not only proliferating but also differentiated cells
 arranged in a specific pattern.
 AU Khaing, Z. Z. [Reprint author]; Taylor, J. L. [Reprint author]; Blum, M.
 [Reprint author]
 CS Dept of Pharmacology, UTHSCSA, San Antonio, TX, USA
 SO Society for Neuroscience Abstracts, (2001) Vol. 27, No. 1, pp. 344. print.
 Meeting Info.: 31st Annual Meeting of the Society for Neuroscience. San
 Diego, California, USA. November 10-15, 2001.
 ISSN: 0190-5295.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 17 Oct 2001
 Last Updated on STN: 23 Feb 2002

L5 ANSWER 191 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2001:486830 BIOSIS
 DN PREV200100486830
 TI Astrocytic remodeling of the cytoskeleton and chromatin, induced under
 serum withdrawal by pleiotropic growth factors - ***EGF***, bFGF, and
 insulin.
 AU Kukekov, V. G. [Reprint author]; Ignatova, T. N. [Reprint author];
 Steindler, D. A. [Reprint author]
 CS Dept. of Neuroscience, McKnight Brain Institute, Univ. of Florida,
 Gainesville, FL, USA
 SO Society for Neuroscience Abstracts, (2001) Vol. 27, No. 1, pp. 342. print.
 Meeting Info.: 31st Annual Meeting of the Society for Neuroscience. San
 Diego, California, USA. November 10-15, 2001.
 ISSN: 0190-5295.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 17 Oct 2001
 Last Updated on STN: 23 Feb 2002

L5 ANSWER 192 OF 269 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2001:756085 CAPLUS
 DN 136:83267
 TI Study on biological properties of neural stem cells from embryonic rat
 hippocampus
 AU Liu, Hui; Yang, Shuyuan; Gao, Yongzhong; Zhang, Jianning; Zhang, Wenzhi
 CS Department of Neurosurgery, General Hospital, Tianjin Medical University,
 Tianjin, 300052, Peop. Rep. China
 SO Zhongguo Shenjing Jingshen Jibing Zazhi (2001), 27(4), 273-275
 CODEN: ZSJZEH; ISSN: 1002-0152
 PB Zhongzhan Yike Daxue Qikan Zhongxin
 DT Journal
 LA Chinese

L5 ANSWER 193 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2001:321033 BIOSIS

TI Adult corneal epithelium as a potential source of neural progenitors.
 AU Ahmad, I. [Reprint author]; Zhao, X. [Reprint author]
 CS Ophthalmology, Nebraska Medical Center, Omaha, NE, USA
 SO IOVS, (March 15, 2001) Vol. 42, No. 4, pp. S197. print.
 Meeting Info.: Annual Meeting of the Association for Research in Vision
 and Ophthalmology. Fort Lauderdale, Florida, USA. April 29-May 04, 2001.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 4 Jul 2001
 Last Updated on STN: 19 Feb 2002

L5 ANSWER 194 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2001:486588 BIOSIS
 DN PREV200100486588
 TI skin-derived stem cells differentiate into multiple neural and non-neural
 cell types.
 AU Fernandes, K. J. L. [Reprint author]; McKenzie, I. A. [Reprint author];
 Toma, J. G. [Reprint author]; Kaplan, D. R. [Reprint author]; Miller, F.
 D. [Reprint author]
 CS Brain Tumor Res Center, Montreal Neurological Inst, Montreal, PQ, Canada
 SO Society for Neuroscience Abstracts, (2001) Vol. 27, No. 1, pp. 57. print.
 Meeting Info.: 31st Annual Meeting of the Society for Neuroscience. San
 Diego, California, USA. November 10-15, 2001.
 ISSN: 0190-5295.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 17 Oct 2001
 Last Updated on STN: 23 Feb 2002

L5 ANSWER 195 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 DUPLICATE 37
 AN 2001:548600 BIOSIS
 DN PREV200100548600
 TI ****TGF**** -alpha induces a stationary, radial-glia like phenotype in
 cultured astrocytes.
 AU Zhou, Rixin; Wu, Xiao; Skalli, Omar [Reprint author]
 CS Department of Anatomy and Cell Biology, University of Illinois at Chicago,
 808 S. Wood Street, Chicago, IL, 60612, USA
 oskalli@uic.edu
 SO Brain Research Bulletin, (September 1, 2001) Vol. 56, No. 1, pp. 37-42.
 print.
 CODEN: BRBUDU. ISSN: 0361-9230.
 DT Article
 LA English
 ED Entered STN: 21 Nov 2001
 Last Updated on STN: 25 Feb 2002

L5 ANSWER 196 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2001:361321 BIOSIS
 DN PREV200100361321
 TI Generation of human dopaminergic CNS precursors: Impact on restorative
 therapy in Parkinson's disease.
 AU Storch, Alexander [Reprint author]; Meissner, Wassilios; Paul, Gesine;
 Boehm, Bernhard O.; Schwarz, Johannes
 CS Ulm, Germany
 SO Neurology, (April 24, 2001) Vol. 56, No. 8 Supplement 3, pp. A7. print.
 Meeting Info.: 53rd Annual Meeting of the American Academy of Neurology.
 Philadelphia, PA, USA. May 05-11, 2001. American Academy of Neurology.
 CODEN: NEURAI. ISSN: 0028-3878.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 2 Aug 2001
 Last Updated on STN: 19 Feb 2002

L5 ANSWER 197 OF 269 USPATFULL on STN
 AN 2000:146162 USPATFULL
 TI Isolated and modified porcine cerebral cortical cells
 IN Dinsmore, Jonathan, Brookline, MA, United States
 PA Diacrin, Inc., Charlestown, MA, United States (U.S. corporation)
 PI US 6140116 20001031
 AI US 1995-551820 19951107 (8)
 RLI Continuation-in-part of Ser. No. US 1995-424856. filed on 19 Apr 1995

Nov 1995, now abandoned
DT Utility
FS Granted
LN.CNT 5001
INCL INCLM: 435/325.000
INCLS: 435/374.000; 424/093.700
NCL NCLM: 435/325.000
NCLS: 424/093.700; 435/374.000
IC [7]
ICM: C12N005-00
EXF 435/325; 435/374; 435/93.7
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 198 OF 269 USPATFULL on STN
AN 2000:105715 USPATFULL
TI Cultures of human CNS neural stem cells
IN Carpenter, Melissa, Lincoln, RI, United States
PA Cytotherapeutics, Inc., Lincoln, RI, United States (U.S. corporation)
PI US 6103530 20000815
AI US 1998-178035 19981023 (9)
RLI Division of Ser. No. US 1997-926313, filed on 5 Sep 1997
DT Utility
FS Granted
LN.CNT 835
INCL INCLM: 435/405.000
INCLS: 435/325.000; 435/368.000; 435/377.000; 435/384.000; 435/387.000;
435/389.000; 435/404.000; 435/406.000
NCL NCLM: 435/405.000
NCLS: 435/325.000; 435/368.000; 435/377.000; 435/384.000; 435/387.000;
435/389.000; 435/404.000; 435/406.000
IC [7]
ICM: C12N005-00
EXF 435/325; 435/368; 435/377; 435/384; 435/387; 435/389; 435/404; 435/405;
435/406
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 199 OF 269 USPATFULL on STN
AN 2000:70818 USPATFULL
TI In vivo genetic modification of growth factor-responsive neural
precursor cells
IN Weiss, Samuel, Alberta, Canada
Reynolds, Brent, Alberta, Canada
Hammang, Joseph P., Barrington, RI, United States
Baetge, E. Edward, Barrington, RI, United States
PA NeuroSpheres Holdings Ltd., Calgary, Canada (non-U.S. corporation)
PI US 6071889 20000606
AI US 1995-479795 19950607 (8)
RLI Continuation-in-part of Ser. No. US 1994-270412, filed on 5 Jul 1994,
now abandoned And a continuation-in-part of Ser. No. US 1995-385404,
filed on 7 Feb 1995, now abandoned And a continuation-in-part of Ser.
No. US 1994-359945, filed on 20 Dec 1994, now abandoned And a
continuation-in-part of Ser. No. US 1995-376062, filed on 20 Jan 1995,
now abandoned And a continuation-in-part of Ser. No. US 1993-149508,
filed on 9 Nov 1993, now abandoned And a continuation-in-part of Ser.
No. US 1994-311099, filed on 23 Sep 1994, now abandoned And a
continuation-in-part of Ser. No. US 1994-338730, filed on 14 Nov 1994,
now abandoned which is a continuation of Ser. No. US 1991-726812, filed
on 8 Jul 1991, now abandoned, said Ser. No. US 1994-270412, filed on 5
Jul 1994, now abandoned which is a continuation of Ser. No. US
1991-726812, filed on 8 Jul 1991, now abandoned, said Ser. No. US
1995-385404, filed on 7 Feb 1995, now abandoned which is a continuation
of Ser. No. US 1992-961813, filed on 16 Oct 1992, now abandoned which is
a continuation-in-part of Ser. No. US 1991-726812, filed on 8 Jul 1991,
now abandoned, said Ser. No. US 1994-359945, filed on 20 Dec 1994, now
abandoned which is a continuation of Ser. No. US 1994-221655, filed on 1
Apr 1994, now abandoned which is a continuation of Ser. No. US
1992-967622, filed on 28 Oct 1992, now abandoned which is a
continuation-in-part of Ser. No. US 1991-726812, filed on 8 Jul 1991,
now abandoned, said Ser. No. US 1995-376062, filed on 20 Jan 1995, now
abandoned which is a continuation of Ser. No. US 1993-10829, filed on 29
Jan 1993, now abandoned which is a continuation-in-part of Ser. No. US
1991-726812, filed on 8 Jul 1991, now abandoned, said Ser. No. US
1993-149508, filed on 9 Nov 1993, now abandoned which is a
continuation-in-part of Ser. No. US 1991-726812, filed on 8 Jul 1991,
now abandoned, said Ser. No. US 1994-311099, filed on 23 Sep 1994, now

filed on 8 Jul 1991, now abandoned
DT Utility
FS Granted
LN.CNT 4261
INCL INCLM: 514/044.000
INCLS: 424/093.100; 424/093.200; 424/093.210; 435/440.000; 435/455.000
NCL NCLM: 514/044.000
NCLS: 424/093.100; 424/093.200; 424/093.210; 435/440.000; 435/455.000
IC [7]
ICM: A61K035-00
ICS: A61K048-00
EXF 514/44; 514/2; 536/23.1; 424/93.1; 424/93.2; 424/93.21; 435/455; 435/440
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 200 OF 269 USPATFULL on STN
AN 2000:40652 USPATFULL
TI Method for production of neuroblasts
IN Gage, Fred H., La Jolla, CA, United States
Ray, Jasodhara, San Diego, CA, United States
PA The Regents of the University of California, Oakland, CA, United States
(U.S. corporation)
PI US 6045807 20000404
AI US 1998-95769 19980610 (9)
RLI Division of Ser. No. US 1993-147843, filed on 3 Nov 1993, now patented,
Pat. No. US 5766948 which is a continuation-in-part of Ser. No. US
1993-1543, filed on 6 Jan 1993, now abandoned
DT Utility
FS Granted
LN.CNT 1577
INCL INCLM: 424/368.000
INCLS: 435/325.000; 435/366.000; 435/395.000; 435/402.000; 435/404.000;
424/093.700; 536/023.100
NCL NCLM: 424/093.210
NCLS: 424/093.700; 435/325.000; 435/366.000; 435/395.000; 435/402.000;
435/404.000; 536/023.100
IC [7]
ICM: C12N005-08
EXF 424/93.7; 435/325; 435/368; 435/395; 435/402; 435/404; 536/23.1

L5 ANSWER 201 OF 269 USPATFULL on STN
AN 2000:34426 USPATFULL
TI In vitro generation of differentiated neurons from cultures of mammalian
multipotential CNS stem cells
IN Johe, Karl K., Potomac, MD, United States
PA NeuralStem Biopharmaceuticals, Ltd., College Park, MD, United States
(U.S. corporation)
PI US 6040180 20000321
AI US 1997-919580 19970507 (8)
RLI Continuation-in-part of Ser. No. US 1996-719450, filed on 25 Sep 1996,
now patented, Pat. No. US 5753506
PRAI US 1996-18206P 19960523 (60)
DT Utility
FS Granted
LN.CNT 2187
INCL INCLM: 435/377.000
INCLS: 435/325.000; 435/368.000; 435/353.000
NCL NCLM: 435/377.000
NCLS: 435/325.000; 435/353.000; 435/368.000
IC [7]
ICM: C12N005-06
EXF 435/325; 435/375; 435/377; 435/347; 435/352; 435/363; 435/366; 435/368
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 202 OF 269 USPATFULL on STN
AN 2000:27802 USPATFULL
TI Methods for differentiating neural stem cells to glial cells using
neuregulins
IN Anderson, David J., Altadena, CA, United States
PA California Institute of Technology, Pasadena, CA, United States (U.S.
corporation)
PI US 6033906 20000307
AI US 1995-372329 19950506 (8)
RLI Continuation-in-part of Ser. No. US 1994-188285, filed on 28 Jan 1994,
now abandoned which is a continuation-in-part of Ser. No. WO
1993-US7000, filed on 26 Jul 1993

FS Granted
LN.CNT 2116
INCL INCLM: 435/325.000
INCLS: 435/353.000; 435/368.000
NCL NCLM: 435/325.000
NCLS: 435/353.000; 435/368.000
IC [7]
ICM: C12N005-00
EXF 435/240.2; 435/325; 435/368; 435/353
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 203 OF 269 USPATFULL on STN
AN 2000:18280 USPATFULL
TI Nucleic acid sequence of senescence associated gene
IN Funk, Walter, Hayward, CA, United States
PA Geron Corporation, Menlo Park, CA, United States (U.S. corporation)
PI US 6025194 20000215
AI US 1997-974180 19971119 (8)
DT Utility
FS Granted
LN.CNT 4667
INCL INCLM: 435/320.100
INCLS: 536/023.100; 536/023.500; 536/024.100; 435/320.100; 435/325.000
NCL NCLM: 435/320.100
NCLS: 435/325.000; 536/023.100; 536/023.500; 536/024.100
IC [7]
ICM: C07H021-04
ICS: C12N015-63; C12N015-85; C12N015-11
EXF 536/23.5; 536/23.1; 536/24.1; 435/320.1; 435/325
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 204 OF 269 USPATFULL on STN
AN 2000:12660 USPATFULL
TI Method for production of neuroblasts
IN Gage, Fred H., La Jolla, CA, United States
Ray, Jasodhara, San Diego, CA, United States
PA The Regents of the University of California, Oakland, CA, United States
(U.S. corporation)
PI US 6020197 20000201
AI US 1998-65883 19980424 (9)
RLI Division of Ser. No. US 1993-147843, filed on 3 Nov 1993, now patented,
Pat. No. US 5766948 which is a continuation-in-part of Ser. No. US
1993-1543, filed on 6 Jan 1993, now abandoned
DT Utility
FS Granted
LN.CNT 1540
INCL INCLM: 435/368.000
INCLS: 435/325.000; 435/366.000; 435/395.000; 435/402.000; 435/404.000
NCL NCLM: 435/368.000
NCLS: 435/325.000; 435/366.000; 435/395.000; 435/402.000; 435/404.000
IC [6]
ICM: C12N005-00
EXF 435/325; 435/368; 435/395; 435/405; 435/402; 435/404; 536/23.1

L5 ANSWER 205 OF 269 USPATFULL on STN
AN 2000:4684 USPATFULL
TI Method for production of neuroblasts
IN Gage, Fred H., La Jolla, CA, United States
Ray, Jasodhara, San Diego, CA, United States
PA University of California, Oakland, CA, United States (U.S. corporation)
PI US 6013521 20000111
AI US 1998-65858 19980424 (9)
RLI Division of Ser. No. US 1993-147843, filed on 3 Nov 1993, now patented,
Pat. No. US 5766948 which is a continuation-in-part of Ser. No. US
1993-1543, filed on 6 Jan 1993, now abandoned
DT Utility
FS Granted
LN.CNT 1548
INCL INCLM: 435/368.000
INCLS: 435/363.000; 435/366.000; 435/384.000; 435/387.000; 435/405.000;
435/406.000; 435/325.000; 435/395.000; 435/402.000; 536/023.100
NCL NCLM: 435/368.000
NCLS: 435/325.000; 435/363.000; 435/366.000; 435/384.000; 435/387.000;
435/395.000; 435/402.000; 435/405.000; 435/406.000; 536/023.100
IC [6]

EXF 435/368; 435/366; 435/395; 435/325; 435/402; 435/404; 435/405; 435/384;
435/387; 435/406; 536/23.1

L5 ANSWER 206 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 38
AN 2000:473307 BIOSIS
DN PREV200000473307
TI Cytomegalovirus infection of the central nervous system stem cells from
mouse embryo: A model for developmental brain disorders induced by
cytomegalovirus.
AU Kosugi, Isao [Reprint author]; Shinmura, Yuichiro; Kawasaki, Hideya; Arai,
Yoshifumi; Li, Ren-Yong; Baba, Satoshi; Tsutsui, Yoshihiro
CS Second Department of Pathology, Hamamatsu University School of Medicine,
3600 Handa-cho, Hamamatsu, 431-3192, Japan
SO Laboratory Investigation, (September, 2000) Vol. 80, No. 9, pp. 1373-1383.
print.
CODEN: LAINAW. ISSN: 0023-6837.
DT Article
LA English
ED Entered STN: 1 Nov 2000
Last Updated on STN: 10 Jan 2002

L5 ANSWER 207 OF 269 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS
RESERVED. on STN DUPLICATE 39
AN 2000287379 EMBASE
TI Epidermal growth factor and fibroblast growth factor 2 cause proliferation
of ependymal precursor cells in the adult rat spinal cord in vivo.
AU Kojima A.; Tator C.H.
CS Dr. C.H. Tator, Toronto Western Hospital, MP 2-435, 399 Bathurst St.,
Toronto, Ont. M5T 2S8, Canada
SO Journal of Neuropathology and Experimental Neurology, (2000) 59/8
(687-697).
Refs: 52
ISSN: 0022-3069 CODEN: JNENAD
CY United States
DT Journal; Article
FS 008 Neurology and Neurosurgery
021 Developmental Biology and Teratology
LA English
SL English

L5 ANSWER 208 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2001:307798 BIOSIS
DN PREV200100307798
TI In vitro and in vivo characterization of neural cells derived from
mesenchymal stem cells.
AU Reyes, Morayma; Verfaillie, Catherine M.
SO Blood, (November 16, 2000) Vol. 96, No. 11 Part 1, pp. 494a. print.
Meeting Info.: 42nd Annual Meeting of the American Society of Hematology.
San Francisco, California, USA. December 01-05, 2000. American Society of
Hematology.
CODEN: BLOOAW. ISSN: 0006-4971.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 27 Jun 2001
Last Updated on STN: 19 Feb 2002

L5 ANSWER 209 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 40
AN 2000:114156 BIOSIS
DN PREV200000114156
TI ***TGF*** -alpha differentially regulates ***GFAP***, vimentin, and
nestin gene expression in U-373 MG glioblastoma cells: Correlation
with cell shape and motility.
AU Zhou, Rixin; Skalli, Omar [Reprint author]
CS Department of Anatomy and Cell Biology, University of Illinois at Chicago,
808 S. Wood Street, M/C 512, Chicago, IL, 60612, USA
SO Experimental Cell Research, (Feb. 1, 2000) Vol. 254, No. 2, pp. 269-278.
print.
CODEN: ECREAL. ISSN: 0014-4827.
DT Article
LA English
ED Entered STN: 29 Mar 2000
Last Updated on STN: 3 Jan 2002

L5 ANSWER 210 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 DUPLICATE 41
 AN 2000:404499 BIOSIS
 DN PREV200000404499
 TI Adult bone marrow stromal cells differentiate into neural cells in vitro.
 AU Sanchez-Ramos, J. [Reprint author]; Song, S. [Reprint author];
 Cardozo-Pelaez, F. [Reprint author]; Hazzi, C.; Stedeford, T.; Willing,
 A.; Freeman, T. B.; Saporta, S.; Janssen, W.; Patel, N.; Cooper, D. R.;
 Sanberg, P. R.
 CS Department of Neurology, University of South Florida, Tampa, FL, USA
 SO Experimental Neurology, (August, 2000) Vol. 164, No. 2, pp. 247-256.
 print.
 CODEN: EXNEAC. ISSN: 0014-4886.
 DT Article
 LA English
 ED Entered STN: 20 Sep 2000
 Last Updated on STN: 8 Jan 2002

L5 ANSWER 211 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 DUPLICATE 42
 AN 2000:372775 BIOSIS
 DN PREV200000372775
 TI Long-term, ***EGF*** -stimulated cultures of attached ***GFAP***
 -positive cells derived from the embryonic mouse lateral ganglionic
 eminence: In vitro and transplantation studies.
 AU Eriksson, Cecilia [Reprint author]; Ericson, Cecilia [Reprint author];
 Gates, Monte A.; Wictorin, Klas [Reprint author]
 CS Wallenberg Neuroscience Center, Department of Physiological Sciences, Lund
 University, S-223 62, Lund, Sweden
 SO Experimental Neurology, (July, 2000) Vol. 164, No. 1, pp. 184-199. print.
 CODEN: EXNEAC. ISSN: 0014-4886.
 DT Article
 LA English
 ED Entered STN: 30 Aug 2000
 Last Updated on STN: 8 Jan 2002

L5 ANSWER 212 OF 269 CANCERLIT on STN DUPLICATE 43
 AN 2000148567 CANCERLIT
 DN 20148567 PubMed ID: 10683274
 TI Establishment and properties of a growth factor-dependent, perpetual
 neural stem cell line from the human CNS.
 AU Villa A; Snyder E Y; Vescovi A; Martinez-Serrano A
 CS Department of Molecular Biology, Center of Molecular Biology Severo Ochoa,
 Autonomous University of Madrid-CSIC, Campus Cantoblanco, Madrid, 28049,
 Spain.
 SO EXPERIMENTAL NEUROLOGY, (2000 Jan) 161 (1) 67-84.
 Journal code: 0370712. ISSN: 0014-4886.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS MEDLINE; Priority Journals
 OS MEDLINE 2000148567
 EM 200003
 ED Entered STN: 20000413
 Last Updated on STN: 20000413

L5 ANSWER 213 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2001:88078 BIOSIS
 DN PREV200100088078
 TI Study of optimal conditions for differentiation of neural cells from bone
 marrow precursors.
 AU Song, S. [Reprint author]; Cardozo-Pelaez, F.; Stedeford, T.; Dailey, M.;
 Willing, A.; Saporta, S.; Janssen, W.; Zigova, T.; Sanberg, P. R.;
 Sanchez-Ramos, J. R.
 CS Univ South Florida " James Haley VA Hosp, Tampa, FL, USA
 SO Society for Neuroscience Abstracts, (2000) Vol. 26, No. 1-2, pp. Abstract
 No.-312.20. print.
 Meeting Info.: 30th Annual Meeting of the Society of Neuroscience. New
 Orleans, LA, USA. November 04-09, 2000. Society for Neuroscience.
 ISSN: 0190-5295.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 14 Feb 2001
 Last Updated on STN: 12 Feb 2002

L5 ANSWER 214 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2001:88070 BIOSIS
 DN PREV200100088070
 TI The ***nestin*** and musashi promoters identify and select two
 distinct pools of neural stem cells from fetal human brain.
 AU Keyoung, H. M. [Reprint author]; Benraiss, A.; Roy, N. S.; Louissant, A.;
 Wang, S.; Rashbaum, W. K.; Kawaguchi, A.; Okano, H.; Goldman, S. A.
 CS Cornell Univ. Medical College, New York, NY, USA
 SO Society for Neuroscience Abstracts, (2000) Vol. 26, No. 1-2, pp. Abstract
 No.-312.12. print.
 Meeting Info.: 30th Annual Meeting of the Society of Neuroscience. New
 Orleans, LA, USA. November 04-09, 2000. Society for Neuroscience.
 ISSN: 0190-5295.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 14 Feb 2001
 Last Updated on STN: 12 Feb 2002

L5 ANSWER 215 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2001:89033 BIOSIS
 DN PREV200100089033
 TI Nonhuman primate (*M. fascicularis*) CNS neuroglial precursors: in vivo
 characterization and in vitro myelinating potential.
 AU Avellana-Adalid, V. [Reprint author]; Vitry, S.; Lachapelle, F.; Baron-Van
 Evercooren, A.
 CS CHU Pitie-Salpetriere, Paris, France
 SO Society for Neuroscience Abstracts, (2000) Vol. 26, No. 1-2, pp. Abstract
 No.-516.3. print.
 Meeting Info.: 30th Annual Meeting of the Society of Neuroscience. New
 Orleans, LA, USA. November 04-09, 2000. Society for Neuroscience.
 ISSN: 0190-5295.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 14 Feb 2001
 Last Updated on STN: 12 Feb 2002

L5 ANSWER 216 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2001:97226 BIOSIS
 DN PREV200100097226
 TI Use of cholera toxin B as an improved marker for transplanted spinal
 progenitor cells in the rat spinal cord.
 AU Sagen, J. [Reprint author]; Lee, J. W.
 CS Univ. Miami Sch. of Med., Miami, FL, USA
 SO Society for Neuroscience Abstracts, (2000) Vol. 26, No. 1-2, pp. Abstract
 No.-416.5. print.
 Meeting Info.: 30th Annual Meeting of the Society of Neuroscience. New
 Orleans, LA, USA. November 04-09, 2000. Society for Neuroscience.
 ISSN: 0190-5295.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 21 Feb 2001
 Last Updated on STN: 15 Feb 2002

L5 ANSWER 217 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2001:88071 BIOSIS
 DN PREV200100088071
 TI Generation of neurones from multi-passage glial cultures.
 AU Fagerstrom, C. [Reprint author]; Eriksson, C.; Wictorin, K.; Campbell, K.
 CS Lund University, Lund, Sweden
 SO Society for Neuroscience Abstracts, (2000) Vol. 26, No. 1-2, pp. Abstract
 No.-312.13. print.
 Meeting Info.: 30th Annual Meeting of the Society of Neuroscience. New
 Orleans, LA, USA. November 04-09, 2000. Society for Neuroscience.
 ISSN: 0190-5295.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 14 Feb 2001
 Last Updated on STN: 12 Feb 2002

L5 ANSWER 218 OF 269 DISSABS COPYRIGHT (C) 2004 ProQuest Information and
 Learning Company: All Rights Reserved on STN

TI Effects of ****TGF**** -alpha on the malignant behavior and gene
expression profile of U-373 MG glioblastoma cells
AU Zhou, Rixin [Ph.D.]; Skalli, Omar [adviser]
CS University of Illinois at Chicago (0799)
SO Dissertation Abstracts International, (1999) Vol. 60, No. 12B, p. 5879.
Order No.: AAI9954839. 104 pages.
DT Dissertation
FS DAI
LA English

L5 ANSWER 219 OF 269 USPATFULL on STN
AN 1999:163509 USPATFULL
TI Methods for differentiating neural stem cells to neurons or smooth
muscle cells using TGT-.beta. super family growth factors
IN Anderson, David J., Altadena, CA, United States
Shah, Nirao M., New York, NY, United States
PA California Institute of Technology, Pasadena, CA, United States (U.S.
corporation)
PI US 6001654 19991214
AI US 1997-846028 19970425 (8)
RLI Continuation-in-part of Ser. No. US 1994-188286, filed on 28 Jan 1994,
now patented, Pat. No. US 5654183 which is a continuation-in-part of
Ser. No. WO 1993-US7000, filed on 26 Jul 1993 which is a
continuation-in-part of Ser. No. US 1992-969088, filed on 29 Oct 1992,
now abandoned which is a continuation-in-part of Ser. No. US
1992-920617, filed on 27 Jul 1992, now abandoned
PRAI US 1997-44797P 19970424 (60)
DT Utility
FS Granted
LN.CNT 2392
INCL INCLM: 435/377.000
INCLS: 435/325.000; 435/352.000; 435/353.000; 435/368.000; 435/375.000
NCL NCLM: 435/377.000
NCLS: 435/325.000; 435/352.000; 435/353.000; 435/368.000; 435/375.000
IC [6]
ICM: C12N005-16
EXF 435/325; 435/375; 435/352; 435/353; 435/377; 435/368
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 220 OF 269 USPATFULL on STN
AN 1999:141572 USPATFULL
TI In vitro induction of dopaminergic cells
IN Weiss, Samuel, Alberta, Canada
Reynolds, Brent, Alberta, Canada
PA NeuroSpheres Holdings Ltd., Calgary, Canada (non-U.S. corporation)
PI US 5981165 19991109
AI US 1995-482079 19950607 (8)
RLI Continuation-in-part of Ser. No. US 1994-339090, filed on 14 Nov 1994,
now abandoned which is a continuation-in-part of Ser. No. US
1994-270412, filed on 5 Jul 1994, now abandoned which is a continuation
of Ser. No. US 1991-726812, filed on 8 Jul 1991, now abandoned
DT Utility
FS Granted
LN.CNT 1154
INCL INCLM: 435/004.000
INCLS: 424/093.700; 435/325.000; 514/002.000; 530/399.000
NCL NCLM: 435/004.000
NCLS: 424/093.700; 435/325.000; 514/002.000; 530/399.000
IC [6]
ICM: C12Q001-00
ICS: C12N005-00; A61K038-30
EXF 424/92R; 424/93.7; 435/1; 435/240.2; 435/4; 435/325; 514/2; 530/399
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 221 OF 269 USPATFULL on STN
AN 1999:141292 USPATFULL
TI Growth factor-induced proliferation of neural precursor cells in vivo
IN Weiss, Samuel, Alberta, Canada
Reynolds, Brent, Alberta, Canada
PA NeuroSpheres Holdings Ltd., Calgary, Canada (non-U.S. corporation)
PI US 5980885 19991109
AI US 1995-486307 19950607 (8)
RLI Continuation-in-part of Ser. No. US 1994-270412, filed on 5 Jul 1994,
now abandoned Ser. No. Ser. No. US 1995-385404, filed on 7 Feb 1995, now
abandoned Ser. No. Ser. No. US 1994-359945. filed on 20 Dec 1994 now

abandoned Ser. No. Ser. No. US 1993-149508, filed on 9 Nov 1993, now
abandoned Ser. No. Ser. No. US 1994-311099, filed on 23 Sep 1994, now
abandoned And Ser. No. US 1994-338730, filed on 14 Nov 1994, now
abandoned which is a continuation-in-part of Ser. No. US 1991-726812,
filed on 8 Jul 1991, now abandoned, said Ser. No. US 270412 which is a
continuation of Ser. No. US 726812, said Ser. No. US 385404 which is a
continuation of Ser. No. US 1992-961813, filed on 16 Oct 1992, now
abandoned which is a continuation-in-part of Ser. No. US 726812, said
Ser. No. US 359945 which is a continuation of Ser. No. US 1994-221655,
filed on 1 Apr 1994, now abandoned which is a continuation of Ser. No.
US 1992-967622, filed on 28 Oct 1992, now abandoned which is a
continuation-in-part of Ser. No. US 726812, said Ser. No. US 376062
which is a continuation of Ser. No. US 1993-10829, filed on 29 Jan 1993,
now abandoned which is a continuation-in-part of Ser. No. US 726812,
said Ser. No. US 149508 which is a continuation-in-part of Ser. No. US
726812, said Ser. No. US 311099 which is a continuation-in-part of Ser.
No. US 726812

DT Utility
FS Granted
LN.CNT 4215
INCL INCLM: 424/093.210
INCLS: 424/093.100; 424/093.200; 435/325.000; 435/360.000; 435/366.000;
435/368.000; 435/377.000; 435/383.000; 435/384.000; 435/440.000;
435/455.000; 435/456.000; 435/457.000; 514/002.000; 514/044.000
NCL NCLM: 424/093.210
NCLS: 424/093.100; 424/093.200; 435/325.000; 435/360.000; 435/366.000;
435/368.000; 435/377.000; 435/383.000; 435/384.000; 435/440.000;
435/455.000; 435/456.000; 435/457.000; 514/002.000; 514/044.000
IC [6]
ICM: A01N063-00
ICS: A01N043-04; C12N005-00; C12N005-08
EXF 435/240.2; 435/325; 435/360; 435/366; 435/368; 435/377; 435/383;
435/455; 435/456; 435/457; 514/2; 514/44; 424/93.1; 424/93.2; 424/93.21
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 222 OF 269 USPATFULL on STN
AN 1999:128445 USPATFULL
TI Human CNS neural stem cells
IN Carpenter, Melissa, Lincoln, RI, United States
PA Cytotherapeutics, Inc., Providence, RI, United States (U.S. corporation)
PI US 5968829 19991019
AI US 1997-926313 19970905 (8)
DT Utility
FS Granted
LN.CNT 942
INCL INCLM: 435/467.000
INCLS: 435/368.000; 435/377.000; 424/093.700
NCL NCLM: 435/467.000
NCLS: 424/093.700; 435/368.000; 435/377.000
IC [6]
ICM: C12N005-08
ICS: C12N005-10
EXF 435/368; 435/377; 435/467; 424/93.7
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 223 OF 269 USPATFULL on STN
AN 1999:117338 USPATFULL
TI Engraftable human neural stem cells
IN Snyder, Evan Y., Jamaica Plain, MA, United States
Wolfe, John H., Philadelphia, PA, United States
Kim, Seung U., Vancouver, Canada
PA The Children's Medical Center Corp., Boston, MA, United States (U.S.
corporation)
PI US 5958767 19990928
AI US 1998-133873 19980814 (9)
DT Utility
FS Granted
LN.CNT 1267
INCL INCLM: 435/368.000
INCLS: 435/455.000
NCL NCLM: 435/368.000
NCLS: 435/455.000
IC [6]
ICM: C12N005-08
EXF 935/325; 935/366; 935/368; 935/455

L5 ANSWER 224 OF 269 USPATFULL on STN
AN 1999:85298 USPATFULL
TI Mammalian multipotent neural stem cells
IN Anderson, David J., Altadena, CA, United States
Stemple, Derek L., Newton, MA, United States
PA California Institute of Technology, Pasadena, CA, United States (U.S.
corporation)
PI US 5928947 19990727
AI US 1995-483142 19950607 (8)
RLI Division of Ser. No. US 1994-188286, filed on 28 Jan 1994, now patented,
Pat. No. US 5654183 And a continuation-in-part of Ser. No. WO
1993-US7000, filed on 26 Jul 1993 which is a continuation-in-part of
Ser. No. US 1992-969088, filed on 29 Oct 1992, now abandoned which is a
continuation-in-part of Ser. No. US 1992-920617, filed on 27 Jul 1992,
now abandoned
DT Utility
FS Granted
LN.CNT 2114
INCL INCLM: 435/455.000
INCLS: 435/069.100; 435/325.000; 435/440.000; 424/093.700
NCL NCLM: 435/455.000
NCLS: 424/093.700; 435/069.100; 435/325.000; 435/440.000
IC [6]
ICM: C12N015-00
ICS: C12N015-85; A16K035-30
EXF 435/69.1; 435/320.1; 435/240.2; 435/325; 400/2; 424/93.7

L5 ANSWER 225 OF 269 USPATFULL on STN
AN 1999:16108 USPATFULL
TI Transgenic mice expressing TSSV40 large T antigen
IN Jat, Parmjit Singh, London, England
Kioussis, Dimitris, London, England
Noble, Mark David, Berkhamstead, England
PA Ludwig Institute For Cancer Research, New York, NY, United States (U.S.
corporation)
PI US 5866759 19990202
AI US 1997-887095 19970702 (8)
RLI Division of Ser. No. US 1993-17320, filed on 11 Feb 1993, now patented,
Pat. No. US 5688692 which is a continuation of Ser. No. US 1991-657809,
filed on 20 Feb 1991, now abandoned
DT Utility
FS Granted
LN.CNT 1955
INCL INCLM: 800/002.000
INCLS: 435/354.000; 935/059.000
NCL NCLM: 800/018.000
NCLS: 435/354.000
IC [6]
ICM: C12N005-00
ICS: C12N015-00
EXF 800/2; 800/DIG.1; 435/354
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 226 OF 269 USPATFULL on STN
AN 1999:4408 USPATFULL
TI Control of cell growth in a bioartificial organ with extracellular
matrix coated microcarriers
IN Schinstine, Malcolm, Ben Salem, PA, United States
Shoichet, Molly S., Toronto, Canada
Gentile, Frank T., Warwick, RI, United States
Hammang, Joseph P., Barrington, RI, United States
Holland, Laura M., Horsham, PA, United States
Cain, Brian M., Everett, MA, United States
Doherty, Edward J., Mansfield, MA, United States
Winn, Shelley R., Smithfield, RI, United States
Aebischer, Patrick, Lutry, Switzerland
PA CytoTherapeutics, Inc., United States (U.S. corporation)
PI US 5858747 19990112
AI US 1995-447810 19950523 (8)
RLI Division of Ser. No. US 1995-432698, filed on 9 May 1995 which is a
continuation-in-part of Ser. No. US 1994-279773, filed on 20 Jul 1994
DT Utility
FS Granted
LN.CNT 2333

INCLS: 424/093.210; 424/093.700; 424/422.000; 435/176.000; 435/177.000;
 435/178.000; 435/377.000; 435/382.000; 435/395.000; 435/403.000;
 435/289.100
 NCL NCLM: 435/182.000
 NCLS: 424/093.210; 424/093.700; 424/422.000; 435/176.000; 435/177.000;
 435/178.000; 435/289.100; 435/377.000; 435/382.000; 435/395.000;
 435/403.000
 IC [6]
 ICM: C12N011-04
 ICS: C12N005-06; C12N005-08; C12N011-02
 EXF 435/178; 435/240.2; 435/240.22; 435/240.23; 435/240.24; 435/240.241;
 435/240.242; 435/240.243; 435/182; 435/176; 435/177; 435/377; 435/382;
 435/395; 435/403; 435/289.1; 424/93.7; 424/93.21; 424/422
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 227 OF 269 Elsevier BIOBASE COPYRIGHT 2004 Elsevier Science B.V.
 on STN
 AN 2000097733 ESBIODASE
 TI Astroglial differentiation of cortical precursor cells triggered by
 activation of the cAMP-dependent signaling pathway
 AU McManus M.F.; Chen L.-C.; Vallejo I.; Vallejo M.
 CS Dr. M. Vallejo, Inst. de Investigaciones Biomedicas, Calle Arturo
 Duperier 4, 28029 Madrid, Spain.
 SO Journal of Neuroscience, (15 OCT 1999), 19/20 (9004-9015), 73
 reference(s)
 CODEN: JNRSDS ISSN: 0270-6474
 DT Journal; Article
 CY United States
 LA English
 SL English

L5 ANSWER 228 OF 269 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS
 RESERVED. on STN
 AN 2000150395 EMBASE
 TI Fibroblast growth factor-2 activates a latent neurogenic program in neural
 stem cells from diverse regions of the adult CNS.
 AU Palmer T.D.; Markakis E.A.; Willhoite A.R.; Safar F.; Gage F.H.
 CS T.D. Palmer, Laboratory of Genetics, Salk Institute, 10010 North Torrey
 Pines Road, San Diego, CA 92037, United States
 SO Journal of Neuroscience, (1 Oct 1999) 19/19 (8487-8497).
 Refs: 56
 ISSN: 0270-6474 CODEN: JNRSDS
 CY United States
 DT Journal; Article
 FS 008 Neurology and Neurosurgery
 021 Developmental Biology and Teratology
 029 Clinical Biochemistry
 LA English
 SL English

L5 ANSWER 229 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2000:148283 BIOSIS
 DN PREV200000148283
 TI ***TGF*** -alpha differentially regulates ***GFAP***, vimentin and
 nestin gene expression in U-373 MG glioblastoma cells. Correlation
 with cell shape and motility.
 AU Zhou, R. [Reprint author]; Skalli, O. [Reprint author]
 CS Department of Anatomy and Cell Biology, University of Illinois at Chicago,
 808 S. Wood Street, Chicago, IL, 60612, USA
 SO Society for Neuroscience Abstracts, (1999) Vol. 25, No. 1-2, pp. 2086.
 print.
 Meeting Info.: 29th Annual Meeting of the Society for Neuroscience. Miami
 Beach, Florida, USA. October 23-28, 1999. Society for Neuroscience.
 ISSN: 0190-5295.
 DT Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LA English
 ED Entered STN: 19 Apr 2000
 Last Updated on STN: 4 Jan 2002

L5 ANSWER 230 OF 269 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2000:22622 CAPLUS
 DN 132:192712
 TI Synaptophysin. A novel marker for human and rat hepatic stellate cells
 AU Cassiman, David; Van Pelt, Jos; De Vos, Rita; Van Lommel. Fons; Desmet

CS Laboratory of Liver and Pancreatic Diseases, Leuven University, Louvain,
B-3000, Belg.
SO American Journal of Pathology (1999), 155(6), 1831-1839
CODEN: AJPA44; ISSN: 0002-9440
PB American Society for Investigative Pathology
DT Journal
LA English
RE.CNT 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 231 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 44
AN 1999:450423 BIOSIS
DN PREV199900450423
TI Lineage restriction of neuroepithelial precursor cells from fetal human
spinal cord.
AU Quinn, Sean M.; Walters, Winston M.; Vescovi, Angelo L.; Whittemore, Scott
R. [Reprint author]
CS Department of Neurological Surgery, University of Louisville School of
Medicine, 210 E. Gray St., Suite 1102, Louisville, KY, 40202, USA
SO Journal of Neuroscience Research, (Sept. 1, 1999) Vol. 57, No. 5, pp.
590-602. print.
CODEN: JNREDK. ISSN: 0360-4012.
DT Article
LA English
ED Entered STN: 26 Oct 1999
Last Updated on STN: 3 May 2000

L5 ANSWER 232 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2000:15884 BIOSIS
DN PREV200000015884
TI Sonic Hedgehog and BMP2 exert opposing actions on proliferation and
differentiation of embryonic neural progenitor cells.
AU Zhu, Gaofa [Reprint author]; Mehler, Mark F.; Zhao, Jie; Yung, Shau Yu;
Kessler, John A.
CS Department of Neurology and Department of Neuroscience, Albert Einstein
College of Medicine, 1300 Morris Park Avenue, Bronx, NY, 10461, USA
SO Developmental Biology, (Nov. 1, 1999) Vol. 215, No. 1, pp. 118-129. print.
CODEN: DEBIAO. ISSN: 0012-1606.
DT Article
LA English
ED Entered STN: 29 Dec 1999
Last Updated on STN: 31 Dec 2001

L5 ANSWER 233 OF 269 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS
RESERVED. on STN
AN 1999260175 EMBASE
TI Microstructure of nonpassaged spheroids formed by ***EGF*** -responsive
neural precursor cells in vitro.
AU Mokry J.; Subrtova D.; Nemecek S.
CS Dr. J. Mokry, Department Histology and Embryology, Charles University,
Medical Faculty, Simkova 870, 500 01 Hradec Kralove, Czech Republic.
mokry@lfhk.cuni.cz
SO Electronic Journal of Pathology and Histology, (1999) 5/2 (43-56).
Refs: 38
ISSN: 0948-0382 CODEN: EPHIFB
CY Germany
DT Journal; Article
FS 008 Neurology and Neurosurgery
029 Clinical Biochemistry
LA English
SL English

L5 ANSWER 234 OF 269 PROMT COPYRIGHT 2004 Gale Group on STN

ACCESSION NUMBER: 1998:578539 PROMT
TITLE: CytoTherapeutics Researchers Demonstrate Potential for
Human Neural Stem Cells to Repair or Replace CNS Tissue.
SOURCE: Business Wire, (9 Nov 1998) pp. 1351.
LANGUAGE: English
WORD COUNT: 1701
FULL TEXT IS AVAILABLE IN THE ALL FORMAT

L5 ANSWER 235 OF 269 USPATFULL on STN
AN 1998:161993 USPATFULL

bioartificial organs
 IN Schinstine, Malcolm, Ben Salem, PA, United States
 Shoichet, Molly S., Toronto, Canada
 Gentile, Frank T., Warwick, RI, United States
 Hammang, Joseph P., Barrington, RI, United States
 Holland, Laura M., Horsham, PA, United States
 Cain, Brian M., Everett, MA, United States
 Doherty, Edward J., Mansfield, MA, United States
 Winn, Shelley R., Smithfield, RI, United States
 Aebischer, Patrick, Lutry, Canada
 PA CytoTherapeutics, Inc., Lincoln, RI, United States (U.S. corporation)
 PI US 5853717 19981229
 AI US 1995-447356 19950523 (8)
 RLI Division of Ser. No. US 1995-432698, filed on 9 May 1995 which is a
 continuation-in-part of Ser. No. US 1994-279773, filed on 20 Jul 1994
 DT Utility
 FS Granted
 LN.CNT 2340
 INCL INCLM: 424/093.210
 INCLS: 435/326.000; 435/372.200; 435/372.300; 435/382.000
 NCL NCLM: 424/093.210
 NCLS: 435/326.000; 435/372.200; 435/372.300; 435/382.000
 IC [6]
 ICM: A01N063-00
 EXF 435/240; 435/243; 435/402; 435/395; 435/382; 435/372.3; 435/372.2;
 435/382.2; 435/326; 424/93.21; 427/2.24
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 236 OF 269 USPATFULL on STN
 AN 1998:159764 USPATFULL
 TI In vitro growth and proliferation of multipotent neural stem cells and
 their progeny
 IN Weiss, Samuel, Alberta, Canada
 Reynolds, Brent, Alberta, Canada
 Hammang, Joseph P., Barrington, RI, United States
 Baetge, E. Edward, Barrington, RI, United States
 PA Neurospheres, Ltd., Canada (non-U.S. corporation)
 PI US 5851832 19981222
 AI US 1995-486648 19950607 (8)
 RLI Continuation-in-part of Ser. No. US 1994-270412, filed on 5 Jul 1994,
 now abandoned which is a continuation of Ser. No. US 1991-726812, filed
 on 8 Jul 1991, now abandoned And a continuation-in-part of Ser. No. US
 1995-385404, filed on 7 Feb 1995, now abandoned which is a continuation
 of Ser. No. US 1992-961813, filed on 16 Oct 1992, now abandoned which is
 a continuation-in-part of Ser. No. US 726812 And Ser. No. US
 1994-359945, filed on 20 Dec 1994, now abandoned which is a continuation
 of Ser. No. US 1994-221655, filed on 1 Apr 1994, now abandoned which is
 a continuation of Ser. No. US 1992-967622, filed on 28 Oct 1992, now
 abandoned which is a continuation-in-part of Ser. No. US 1991-726812,
 filed on 8 Jul 1991, now abandoned And Ser. No. US 1995-376062, filed on
 20 Jan 1995, now abandoned which is a continuation of Ser. No. US
 1993-10829, filed on 29 Jan 1993, now abandoned which is a
 continuation-in-part of Ser. No. US 726812 And Ser. No. US 1993-149508,
 filed on 9 Nov 1993, now abandoned which is a continuation-in-part of
 Ser. No. US 726812 And Ser. No. US 1994-311099, filed on 23 Sep 1994,
 now abandoned which is a continuation-in-part of Ser. No. US 726812 And
 Ser. No. US 1994-338730, filed on 14 Nov 1994, now abandoned which is a
 continuation-in-part of Ser. No. US 726812
 DT Utility
 FS Granted
 LN.CNT 4487
 INCL INCLM: 435/368.000
 INCLS: 435/325.000; 435/366.000; 435/383.000; 435/384.000
 NCL NCLM: 435/368.000
 NCLS: 435/325.000; 435/366.000; 435/377.000; 435/383.000; 435/384.000
 IC [6]
 ICM: C12N005-06
 ICS: C12N005-08; C12N005-02
 EXF 435/240.2; 435/325; 435/366; 435/368; 435/377; 435/383; 435/384
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 237 OF 269 USPATFULL on STN
 AN 1998:157163 USPATFULL
 TI Mammalian multipotent neural stem cells
 IN Anderson, David J., Altadena, CA, United States

PA California Institute of Technology, Pasadena, CA, United States (U.S. corporation)
 PI US 5849553 19981215
 AI US 1995-485612 19950607 (8)
 RLI Continuation-in-part of Ser. No. US 1994-188286, filed on 28 Jan 1994, now patented, Pat. No. US 5654183 which is a continuation-in-part of Ser. No. US 1992-969088, filed on 29 Oct 1992, now abandoned which is a continuation-in-part of Ser. No. US 1992-920617, filed on 27 Jul 1992, now abandoned
 DT Utility
 FS Granted
 LN.CNT 3072
 INCL INCLM: 435/172.300
 INCLS: 435/069.100; 435/320.100; 435/325.000; 435/353.000
 NCL NCLM: 435/467.000
 NCLS: 435/069.100; 435/320.100; 435/325.000; 435/353.000; 435/368.000; 435/455.000; 435/462.000
 IC [6]
 ICM: C12N015-85
 ICS: C12N015-09
 EXF 435/69.1; 435/172.3; 435/320.1; 435/325; 435/353
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 238 OF 269 USPATFULL on STN
 AN 1998:150454 USPATFULL
 TI Controlling proliferation of cells before and after encapsulation in a bioartificial organ by gene transformation
 IN Schinstine, Malcolm, Ben Salem, PA, United States
 Shoichet, Molly S., Toronto, Canada
 Gentile, Frank T., Warwick, RI, United States
 Hammang, Joseph P., Barrington, RI, United States
 Holland, Laura M., Horsham, PA, United States
 Cain, Brian M., Everett, MA, United States
 Doherty, Edward J., Mansfield, MA, United States
 Winn, Shelley R., Smithfield, RI, United States
 Aebischer, Patrick, Lutry, Switzerland
 PA CytoTherapeutics, Inc., United States (U.S. corporation)
 PI US 5843431 19981201
 AI US 1995-432698 19950509 (8)
 RLI Continuation-in-part of Ser. No. US 1994-279773, filed on 20 Jul 1994
 DT Utility
 FS Granted
 LN.CNT 2352
 INCL INCLM: 424/093.210
 INCLS: 435/172.300; 435/174.000; 435/178.000; 435/377.000; 435/382.000; 435/395.000; 424/093.700; 424/422.000
 NCL NCLM: 424/093.210
 NCLS: 424/093.700; 424/422.000; 435/174.000; 435/178.000; 435/377.000; 435/382.000; 435/395.000; 435/467.000
 IC [6]
 ICM: A61K048-00
 ICS: C12N011-00; C12N005-00; C12N011-10
 EXF 435/174; 435/178; 435/172.3; 435/240.7; 435/240.22; 435/240.23; 435/240.24; 435/240.241; 435/240.242; 435/240.243; 435/377; 435/382; 435/395; 424/93.21; 424/93.7; 424/422
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 239 OF 269 USPATFULL on STN
 AN 1998:147298 USPATFULL
 TI Methods and compositions of growth control for cells encapsulated within bioartificial organs
 IN Schinstine, Malcolm, Ben Salem, PA, United States
 Shoichet, Molly S., Toronto, Canada
 Gentile, Frank T., Warwick, RI, United States
 Hammang, Joseph P., Barrington, RI, United States
 Holland, Laura M., Horsham, PA, United States
 Cain, Brian M., Everett, MA, United States
 Doherty, Edward J., Mansfield, MA, United States
 Winn, Shelley R., Smithfield, RI, United States
 Aebischer, Patrick, Lutry, Switzerland
 PA CytoTherapeutics, Inc., United States (U.S. corporation)
 PI US 5840576 19981124
 AI US 1995-445193 19950523 (8)
 RLI Division of Ser. No. US 1995-432698, filed on 9 May 1995 which is a continuation-in-part of Ser. No. US 1994-279773, filed on 20 Jul 1994

FS Granted
LN.CNT 2293
INCL INCLM: 435/325.000
INCLS: 435/375.000; 435/377.000; 435/400.000
NCL NCLM: 435/325.000
NCLS: 435/375.000; 435/377.000; 435/400.000
IC [6]
ICM: C12N005-00
EXF 435/240.2; 435/240.22; 435/240.23; 435/240.242; 435/240.243; 435/325;
435/375; 435/377; 435/400
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 240 OF 269 USPATFULL on STN
AN 1998:138431 USPATFULL
TI Methods and compositions of growth control for cells encapsulated within
bioartificial organs
IN Schinstine, Malcolm, Ben Salem, PA, United States
Shoichet, Molly S., Toronto, Canada
Gentile, Frank T., Warwick, RI, United States
Hammang, Joseph P., Barrington, RI, United States
Holland, Laura M., Horsham, PA, United States
Cain, Brian M., Everett, MA, United States
Doherty, Edward J., Mansfield, MA, United States
Winn, Shelley R., Smithfield, RI, United States
Aebischer, Patrick, Lutry, Switzerland
PA CytoTherapeutics, Inc., Lincoln, RI, United States (U.S. corporation)
PI US 5833979 19981110
AI US 1995-447771 19950523 (8)
RLI Division of Ser. No. US 1995-432698, filed on 9 May 1995 which is a
continuation-in-part of Ser. No. US 1994-279773, filed on 20 Jul 1994
DT Utility
FS Granted
LN.CNT 2266
INCL INCLM: 424/093.210
INCLS: 424/553.000; 424/556.000; 435/174.000; 435/352.000
NCL NCLM: 424/093.210
NCLS: 424/553.000; 424/556.000; 435/174.000; 435/352.000
IC [6]
ICM: A01N063-00
EXF 435/240; 435/243; 435/174; 435/352; 424/93.21; 424/553; 424/556
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 241 OF 269 USPATFULL on STN
AN 1998:98815 USPATFULL
TI Method for controlling proliferation and differentiation of cells
encapsulated within bioartificial organs
IN Schinstine, Malcolm, Ben Salem, PA, United States
Shoichet, Molly S., Toronto, Canada
Gentile, Frank T., Warwick, RI, United States
Hammang, Joseph P., Barrington, RI, United States
Holland, Laura M., Horsham, PA, United States
Cain, Brian M., Everett, MA, United States
Doherty, Edward J., Mansfield, MA, United States
Winn, Shelley R., Smithfield, RI, United States
Aebischer, Patrick, Lutry, Switzerland
PA Cytotherapeutics, Inc., Lincoln, RI, United States (U.S. corporation)
PI US 5795790 19980818
AI US 1995-448201 19950523 (8)
RLI Division of Ser. No. US 1995-432698, filed on 9 May 1995 which is a
continuation-in-part of Ser. No. US 1994-279773, filed on 20 Jul 1994
DT Utility
FS Granted
LN.CNT 2311
INCL INCLM: 435/382.000
INCLS: 424/093.700; 435/177.000; 435/178.000; 435/180.000; 435/182.000
NCL NCLM: 435/382.000
NCLS: 424/093.700; 435/177.000; 435/178.000; 435/180.000; 435/182.000
IC [6]
ICM: C12N005-00
ICS: C12N011-02; C12N011-04; A61K035-12
EXF 435/177; 435/178; 435/240.7; 435/240.22; 435/240.23; 435/240.24;
435/240.241; 435/240.242; 435/240.243; 435/180; 435/182; 424/93.7
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 242 OF 269 USPATFULL on STN

TI Method for controlling the distribution of cells within a bioartificial
organ using polycethylene oxide-poly (dimethylsiloxane) copolymer
IN Schinstine, Malcolm, Bensalem, PA, United States
Shoichet, Molly S., Toronto, Canada
Gentile, Frank T., Warwick, RI, United States
Hammang, Joseph P., Barrington, RI, United States
Holland, Laura M., Horsham, PA, United States
Cain, Brian M., Everett, MA, United States
Doherty, Edward J., Mansfield, MA, United States
Winn, Shelley R., Smithfield, RI, United States
Aebischer, Patrick, Lutry, Switzerland
PA Cytotherapeutics, Inc., United States (U.S. corporation)
PI US 5776747 19980707
AI US 1995-447778 19950523 (8)
RLI Division of Ser. No. US 1995-432692, filed on 9 May 1995
Continuation-in-part of Ser. No. US 1994-279973, filed on 20 Jul 1994
DT Utility
FS Granted
LN.CNT 2264
INCL INCLM: 435/177.000
INCLS: 435/180.000; 435/181.000; 435/182.000
NCL NCLM: 435/177.000
NCLS: 435/180.000; 435/181.000; 435/182.000
IC [6]
ICM: C12N011-02
ICS: C12N011-08; C12N011-06; C12N011-04
EXF 435/182; 435/177; 435/180; 435/181
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 243 OF 269 USPATFULL on STN
AN 1998:72446 USPATFULL
TI Regulatable retrovirus system for genetic modification of cells
IN Gage, Fred H., La Jolla, CA, United States
Ray, Jasodhara, San Diego, CA, United States
Hoshimaru, Minoru, Shiga-ken, Japan
PA The Regents of the University of California, Oakland, CA, United States
(U.S. corporation)
PI US 5770414 19980623
AI US 1996-602203 19960220 (8)
DT Utility
FS Granted
LN.CNT 1051
INCL INCLM: 435/172.300
INCLS: 435/320.100; 435/353.000; 435/357.000
NCL NCLM: 435/456.000
NCLS: 435/320.100; 435/353.000; 435/357.000
IC [6]
ICM: C12N015-00
EXF 435/320.1; 435/69.1; 435/69.2; 435/172.1; 435/172.3; 435/353; 435/240.2;
435/357; 935/22; 935/29; 935/32; 935/36; 935/41; 935/43; 935/57; 935/70
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 244 OF 269 USPATFULL on STN
AN 1998:68873 USPATFULL
TI Method for production of neuroblasts
IN Gage, Fred H., La Jolla, CA, United States
Ray, Jasodhara, San Diego, CA, United States
PA The Regents of the University of California, Oakland, CA, United States
(U.S. corporation)
PI US 5766948 19980616
AI US 1993-147843 19931103 (8)
RLI Continuation-in-part of Ser. No. US 1993-1543, filed on 6 Jan 1993, now
abandoned
DT Utility
FS Granted
LN.CNT 1536
INCL INCLM: 435/368.000
INCLS: 435/325.000; 435/366.000; 435/395.000; 435/402.000; 435/404.000
NCL NCLM: 435/368.000
NCLS: 435/325.000; 435/366.000; 435/395.000; 435/402.000; 435/404.000
IC [6]
ICM: C12N005-00
EXF 435/240.2; 435/240.21; 435/240.23; 435/240.243; 435/240.3; 435/240.31;
435/325; 435/366; 435/368; 435/404; 435/395; 435/402

AN 1998:54752 USPATFULL
TI Isolation propagation and directed differentiation of stem cells from
embryonic and adult central nervous system of mammals
IN Johe, Karl K., Potomac, MD, United States
PA CNS Stem Cell Technology, Inc., Bethesda, MD, United States (U.S.
corporation)
PI US 5753506 19980519
AI US 1996-719450 19960925 (8)
PRAI US 1996-18206P 19960523 (60)
DT Utility
FS Granted
LN.CNT 1705
INCL INCLM: 435/377.000
INCLS: 435/325.000; 435/366.000; 435/368.000
NCL NCLM: 435/377.000
NCLS: 435/325.000; 435/366.000; 435/368.000
IC [6]
ICM: C12N005-08
EXF 435/240.2; 435/240.21; 435/240.23; 435/240.1; 435/325; 435/347; 435/352;
435/363; 435/366; 435/368; 435/375; 435/377
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 246 OF 269 USPATFULL on STN
AN 1998:51459 USPATFULL
TI In vitro growth and proliferation of genetically modified multipotent
neural stem cells and their progeny
IN Weiss, Samuel, Alberta, Canada
Reynolds, Brent, Alberta, Canada
Hammang, Joseph P., Barrington, RI, United States
Baetge, E. Edward, Barrington, RI, United States
PA NeuroSpheres Holdings Ltd., Calgary, Canada (non-U.S. corporation)
PI US 5750376 19980512
AI US 1995-483122 19950607 (8)
RLI Continuation-in-part of Ser. No. US 1994-270412, filed on 5 Jul 1994,
now abandoned Ser. No. Ser. No. US 1995-385404, filed on 7 Feb 1995, now
abandoned Ser. No. Ser. No. US 1994-359945, filed on 20 Dec 1994, now
abandoned Ser. No. Ser. No. US 1995-376062, filed on 20 Jan 1995, now
abandoned Ser. No. Ser. No. US 1993-149508, filed on 9 Nov 1993, now
abandoned Ser. No. Ser. No. US 1994-311099, filed on 23 Sep 1994, now
abandoned And Ser. No. US 1994-338730, filed on 14 Nov 1994, now
abandoned which is a continuation-in-part of Ser. No. US 1991-726812,
filed on 8 Jul 1991, now abandoned, said Ser. No. US 1995-385404, filed
on 7 Feb 1995, now abandoned which is a continuation of Ser. No. US
1992-961813, filed on 16 Oct 1992, now abandoned which is a
continuation-in-part of Ser. No. US 1991-726812, filed on 8 Jul 1991,
now abandoned, said Ser. No. US 1994-359345, filed on 20 Dec 1994, now
abandoned which is a continuation of Ser. No. US 1994-221655, filed on 1
Apr 1994, now abandoned which is a continuation of Ser. No. US
1992-967622, filed on 28 Oct 1992, now abandoned which is a
continuation-in-part of Ser. No. US 1991-726812, filed on 8 Jul 1991,
now abandoned, said Ser. No. US 1995-376062, filed on 20 Jan 1995, now
abandoned which is a continuation of Ser. No. US 1993-10829, filed on 29
Jan 1993, now abandoned which is a continuation-in-part of Ser. No. US
1991-726812, filed on 8 Jul 1991, now abandoned, said Ser. No. US
1994-270412, filed on 5 Jul 1994, now abandoned Ser. No. Ser. No. US
1993-149508, filed on 9 Nov 1993, now abandoned And Ser. No. US
1994-311099, filed on 23 Sep 1994, now abandoned, each Ser. No. US -
which is a continuation-in-part of Ser. No. US 1991-726812, filed on 8
Jul 1991, now abandoned
DT Utility
FS Granted
LN.CNT 4339
INCL INCLM: 435/069.520
INCLS: 435/069.100; 435/172.300; 435/325.000; 435/368.000; 435/377.000;
435/384.000; 435/392.000; 435/395.000
NCL NCLM: 435/069.520
NCLS: 435/069.100; 435/325.000; 435/368.000; 435/377.000; 435/384.000;
435/392.000; 435/395.000; 435/455.000; 435/456.000; 435/458.000;
435/461.000
IC [6]
ICM: C12N005-00
ICS: C12N005-08; C12N005-10; C12P001-00
EXF 435/240.2; 435/172.3; 435/69.1; 435/69.52; 435/325; 435/368; 435/377;
435/384; 435/392; 435/395
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 247 OF 269 USPATFULL on STN
 AN 1998:27764 USPATFULL
 TI Tumor- or cell-specific herpes simplex virus replication
 IN Martuza, Robert L., Chevy Chase, MD, United States
 Rabkin, Samuel D., Bethesda, MD, United States
 Miyatake, Shin-ichi, Ohtsu, Japan
 PA Georgetown University, Washington, DC, United States (U.S. corporation)
 PI US 5728379 19980317
 AI US 1995-486147 19950607 (8)
 RLI Continuation-in-part of Ser. No. US 1994-264581, filed on 23 Jun 1994,
 now patented, Pat. No. US 5585096
 DT Utility
 FS Granted
 LN.CNT 2532
 INCL INCLM: 424/093.200
 INCLS: 435/172.300; 435/320.100; 935/022.000; 935/032.000
 NCL NCLM: 424/093.200
 NCLS: 435/320.100; 435/456.000
 IC [6]
 ICM: A01N063-00
 ICS: A61K048-00; C12N015-00
 EXF 514/44; 435/172.3; 435/320.1; 424/93.2; 935/23; 935/32
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 248 OF 269 Elsevier BIOBASE COPYRIGHT 2004 Elsevier Science B.V.
 on STN
 AN 1999010644 ESBIIOBASE
 TI A constitutively active epidermal growth factor receptor cooperates with
 disruption of G.sub.1 cell-cycle arrest pathways to induce glioma-like
 lesions in mice
 AU Holland E.C.; Hively W.P.; Depinho R.A.; Varmus H.E.
 CS E.C. Holland, Depts. of Neurosurgery/Molec. Gen., MD Anderson Cancer
 Center, Houston, TX 77030, United States.
 E-mail: eholland@notes.mdacc.tmc.edu
 SO Genes and Development, (01 DEC 1998), 12/23 (3675-3685), 43 reference(s)
 CODEN: GEDEEP ISSN: 0890-9369
 DT Journal; Article
 CY United States
 LA English
 SL English

L5 ANSWER 249 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 DUPLICATE 45
 AN 1998:395165 BIOSIS
 DN PREV199800395165
 TI Establishment of an epidermal growth factor-dependent, multipotent neural
 precursor cell line.
 AU Nakagaito, Yumiko; Satoh, Motonobu; Kuno, Haruhiko; Iwama, Toshi;
 Takeuchi, Masao; Hakura, Akira; Yoshida, Touho [Reprint author]
 CS Inst. Fermentation Osaka, 2-17-85 Juso-honmachi, Yodogawa-ku, Osaka 532,
 Japan
 SO In Vitro Cellular and Developmental Biology Animal, (July-Aug., 1998) Vol.
 34, No. 7, pp. 585-592. print.
 ISSN: 1071-2690.
 DT Article
 LA English
 ED Entered STN: 10 Sep 1998
 Last Updated on STN: 10 Sep 1998

L5 ANSWER 250 OF 269 MEDLINE on STN
 AN 1999065740 MEDLINE
 DN PubMed ID: 9824552
 TI Long-term nonpassaged ***EGF*** -responsive neural precursor cells are
 stem cells.
 AU Zhou F C; Chiang Y H
 CS Department of Anatomy and Program of Medical Neurobiology, Indiana
 University School of Medicine, Indianapolis, Ind, USA.
 NC R29 HD 30508 (NICHD)
 SO Wound repair and regeneration : official publication of the Wound Healing
 Society [and] European Tissue Repair Society, (1998 Jul-Aug) 6 (4) 337-48.
 Journal code: 9310939. ISSN: 1067-1927.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals

ED Entered STN: 19990128
Last Updated on STN: 20000303
Entered Medline: 19990114

L5 ANSWER 251 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 46
AN 1998:359018 BIOSIS
DN PREV199800359018
TI Incorporation and glial differentiation of mouse ***EGF*** -responsive
neural progenitor cells after transplantation into the embryonic rat
brain.
AU Winkler, Christian [Reprint author]; Fricker, Rosemary A. [Reprint
author]; Gates, Monte A. [Reprint author]; Olsson, Martin [Reprint
author]; Hammang, Joseph P.; Carpenter, Melissa K.; Bjorklund, Anders
[Reprint author]
CS Dep. Physiol. Neurosci., Wallenberg Neurosci. Cent., Lund Univ., S-22362
Lund, Sweden
SO Molecular and Cellular Neuroscience, (June, 1998) Vol. 11, No. 3, pp.
99-116. print.
CODEN: MOCNED. ISSN: 1044-7431.
DT Article
LA English
ED Entered STN: 27 Aug 1998
Last Updated on STN: 27 Aug 1998

L5 ANSWER 252 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 47
AN 1998:81741 BIOSIS
DN PREV199800081741
TI Cell type-specific development of rodent central nervous system progenitor
cells in culture.
AU Meltzer, Hal; Hatton, James D.; U, Hoi Sang [Reprint author]
CS Division Neurosurgery 8893, Univ. California-San Diego School Med., 200
West Arbor Drive, San Diego, CA 92103-8893, USA
SO Journal of Neurosurgery, (Jan., 1998) Vol. 88, No. 1, pp. 93-98. print.
CODEN: JONSAC. ISSN: 0022-3085.
DT Article
LA English
ED Entered STN: 24 Feb 1998
Last Updated on STN: 24 Feb 1998

L5 ANSWER 253 OF 269 USPATFULL on STN
AN 97:112318 USPATFULL
TI Neural chest stem cell assay
IN Anderson, David J., Altadena, CA, United States
Stemple, Derek L., Newton, MA, United States
PA California Institute of Technology, Pasadena, CA, United States (U.S.
corporation)
PI US 5693482 19971202
AI US 1995-474506 19950607 (8)
RLI Division of Ser. No. US 1994-188286, filed on 28 Jan 1994 which is a
continuation-in-part of Ser. No. US 1992-969088, filed on 29 Oct 1992,
now abandoned which is a continuation-in-part of Ser. No. US
1992-920617, filed on 27 Jul 1992, now abandoned
DT Utility
FS Granted
LN.CNT 2114
INCL INCLM: 435/029.000
INCLS: 435/240.200
NCL NCLM: 435/029.000
IC [6]
ICM: C12Q001-02
ICS: C12N015-85
EXF 435/29; 435/240.2; 435/172.1
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 254 OF 269 USPATFULL on STN
AN 97:106979 USPATFULL
TI Transgenic mouse cells expressing ts SV40 large T
IN Jat, Parmjit Singh, London, England
Kioussis, Dimitris, London, England
Noble, Mark David, Berkhamstead, England
PA Ludwig Institute for Cancer Research, New York, NY, United States (U.S.
corporation)
PI US 5688692 19971118

RLI Continuation of Ser. No. US 1991-657809, filed on 20 Feb 1991, now
abandoned
PRAI GB 1990-3791 19900220
DT Utility
FS Granted
LN.CNT 1984
INCL INCLM: 435/354.000
INCLS: 435/325.000; 435/377.000; 435/069.100; 800/002.000
NCL NCLM: 435/354.000
NCLS: 435/069.100; 435/325.000; 435/377.000
IC [6]
ICM: C12N005-00
ICS: C12N015-00; C12P021-06
EXF 800/2; 435/240.1
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 255 OF 269 USPATFULL on STN
AN 97:88884 USPATFULL
TI Immortalized neural crest stem cells and methods of making
IN Anderson, David J., Altadena, CA, United States
Stemple, Derek L., Newton, MA, United States
PA California Institute of Technology, Pasadena, CA, United States (U.S.
corporation)
PI US 5672499 19970930
AI US 1995-478920 19950607 (8)
RLI Division of Ser. No. US 1994-188286, filed on 28 Jan 1994 which is a
continuation-in-part of Ser. No. US 1992-969088, filed on 29 Oct 1992,
now abandoned which is a continuation-in-part of Ser. No. US
1992-920617, filed on 27 Jul 1992, now abandoned
DT Utility
FS Granted
LN.CNT 2112
INCL INCLM: 435/240.400
INCLS: 435/069.100; 435/172.300; 435/320.100
NCL NCLM: 435/353.000
NCLS: 435/069.100; 435/320.100; 435/325.000; 435/368.000; 435/467.000
IC [6]
ICM: C12Q001-02
ICS: C12N015-85
EXF 435/69.1; 435/172.3; 435/320.1; 435/240.2
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 256 OF 269 USPATFULL on STN
AN 97:68355 USPATFULL
TI Genetically engineered mammalian neural crest stem cells
IN Anderson, David J., Altadena, CA, United States
Stemple, Derek L., Newton, MA, United States
PA California Institute of Technology, Pasadena, CA, United States (U.S.
corporation)
PI US 5654183 19970805
AI US 1994-188286 19940128 (8)
RLI Continuation-in-part of Ser. No. US 1992-996088, filed on 23 Dec 1992,
now patented, Pat. No. US 5365699 which is a continuation-in-part of
Ser. No. US 1992-920617, filed on 27 Jul 1992, now abandoned
DT Utility
FS Granted
LN.CNT 2162
INCL INCLM: 435/172.300
INCLS: 435/069.100; 435/320.100; 435/325.000; 435/353.000; 435/368.000
NCL NCLM: 435/456.000
NCLS: 435/069.100; 435/320.100; 435/325.000; 435/353.000; 435/368.000
IC [6]
ICM: C12N015-85
ICS: C12N015-00
EXF 435/69.1; 435/172.3; 435/240.2; 435/320.1; 424/93.21; 514/44
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 257 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 48
AN 1997:306495 BIOSIS
DN PREV199799614298
TI Basic fibroblast growth factor prolong the proliferation of rat cortical
progenitor cells in vitro without altering their cell cycle parameters.
AU Cavanagh, J. F. R. [Reprint author]; Mione, M. C.; Pappas, I. S.;
Parnavelas, J. G.

SO WC1E 6BT, UK
 Cerebral Cortex, (1997) Vol. 7, No. 4, pp. 293-302.
 ISSN: 1047-3211.
 DT Article
 LA English
 ED Entered STN: 26 Jul 1997
 Last Updated on STN: 26 Jul 1997

L5 ANSWER 258 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 DUPLICATE 49
 AN 1997:160609 BIOSIS
 DN PREV199799459812
 TI Co-expression of MAP-2 and ***GFAP*** in cells developing from rat
 EGF responsive precursor cells.
 AU Rosser, A. E. [Reprint author]; Tyers, P.; Borg, M. Ter; Dunnett, S. B.;
 Svendsen, C. N.
 CS MRC Cambridge Cent. Brain Repair, Cambridge Univ. Forvie Site, Robinson
 Way, Cambridge CB2 2PY, UK
 SO Developmental Brain Research, (1997) Vol. 98, No. 2, pp. 291-295.
 CODEN: DBRRDB. ISSN: 0165-3806.
 DT Article
 LA English
 ED Entered STN: 15 Apr 1997
 Last Updated on STN: 15 Apr 1997

L5 ANSWER 259 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 DUPLICATE 50
 AN 1997:341921 BIOSIS
 DN PREV199799641124
 TI Neuroepithelial stem cells from the embryonic spinal cord: Isolation,
 characterization, and clonal analysis.
 AU Kalyani, Anjali; Hobson, Kristin; Rao, Mahendra S. [Reprint author]
 CS Dep. Neurobiol. Anat., Univ. Utah Sch. Med., 50 North Medical Dr., Salt
 Lake City, UT 84132, USA
 SO Developmental Biology, (1997) Vol. 186, No. 2, pp. 202-223.
 CODEN: DEBIAO. ISSN: 0012-1606.
 DT Article
 LA English
 ED Entered STN: 11 Aug 1997
 Last Updated on STN: 11 Aug 1997

L5 ANSWER 260 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 DUPLICATE 51
 AN 1998:51401 BIOSIS
 DN PREV199800051401
 TI In vitro cell density-dependent clonal growth of ***EGF*** -responsive
 murine neural progenitor cells under serum-free conditions.
 AU Hulsas, R. [Reprint author]; Tiarks, C.; Reilly, J.; Hsieh, C.-C.; Recht,
 L.; Quesenberry, P. J. [Reprint author]
 CS Dep. Cell Biol., Univ. Massachusetts Med. Center and Cancer Center,
 Worcester, MA 01605, USA
 SO Experimental Neurology, (Nov., 1997) Vol. 148, No. 1, pp. 147-156. print.
 CODEN: EXNEAC. ISSN: 0014-4886.
 DT Article
 LA English
 ED Entered STN: 27 Jan 1998
 Last Updated on STN: 27 Jan 1998

L5 ANSWER 261 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 DUPLICATE 52
 AN 1997:214868 BIOSIS
 DN PREV199799521372
 TI Isolation, cloning and characterization of a putative type-1 astrocyte
 cell line.
 AU Seidman, Kimberly J. N.; Teng, Andelle L.; Rosenkopf, Robin; Spilotro,
 Paul; Weyhenmeyer, James A. [Reprint author]
 CS Dep. Cell Structural Biol., Univ. Illinois, 190 Medical Sci. Build.,
 MC-714, 506 South Matthews Ave., Urbana, IL 61801, USA
 SO Brain Research, (1997) Vol. 753, No. 1, pp. 18-26.
 CODEN: BRREAP. ISSN: 0006-8993.
 DT Article
 LA English
 ED Entered STN: 22 May 1997
 Last Updated on STN: 22 May 1997

DUPLICATE 53
 AN 1996:231067 BIOSIS
 DN PREV199698795196
 TI Morphological differentiation of astroglial progenitor cells from
 EGF -responsive neurospheres in response to fetal calf serum, basic
 fibroblast growth factor, and retinol.
 AU Chiang, Yung H.; Silani, Vincenzo; Zhou, Feng C. [Reprint author]
 CS Dep. Anatomy, MS 508, Indiana Univ. Sch. Med., 635 Barnhill Dr.,
 Indianapolis, IN 46202, USA
 SO Cell Transplantation, (1996) Vol. 5, No. 2, pp. 179-189.
 ISSN: 0963-6897.
 DT Article
 LA English
 ED Entered STN: 28 May 1996
 Last Updated on STN: 28 May 1996

L5 ANSWER 263 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 DUPLICATE 54
 AN 1996:473574 BIOSIS
 DN PREV199699203130
 TI Expression of neuronal antigens by astrocytes derived from ***EGF***
 -generated neuroprogenitor cells.
 AU Schinstine, Malcolm; Iacovitti, Lorraine
 CS Dep. Neurobiol. and Anat., Med. Coll. Pa. Hahnemann Univ., Broad and Vine
 St., Philadelphia, PA 19102, USA
 SO Experimental Neurology, (1996) Vol. 141, No. 1, pp. 67-78.
 CODEN: EXNEAC. ISSN: 0014-4886.
 DT Article
 LA English
 ED Entered STN: 24 Oct 1996
 Last Updated on STN: 24 Oct 1996

L5 ANSWER 264 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 DUPLICATE 55
 AN 1995:507236 BIOSIS
 DN PREV199598512286
 TI Differentiation of serum-free mouse embryo cells into astrocytes is
 accompanied by induction of glutamine synthetase activity.
 AU Loo, D. T. [Reprint author]; Althoen, M. C.; Cotman, C. W.
 CS Bristol-Myers Squibb PRI, 3005 First Ave., Seattle, WA 98121, USA
 SO Journal of Neuroscience Research, (1995) Vol. 42, No. 2, pp. 184-191.
 CODEN: JNREDK. ISSN: 0360-4012.
 DT Article
 LA English
 ED Entered STN: 29 Nov 1995
 Last Updated on STN: 29 Nov 1995

L5 ANSWER 265 OF 269 CANCERLIT on STN DUPLICATE 56
 AN 96122596 CANCERLIT
 DN 96122596 PubMed ID: 8568917
 TI Epidermal growth factor (***EGF***), transforming growth factor-alpha
 (***TGF*** -alpha), and basic fibroblast growth factor (bFGF)
 differentially influence neural precursor cells of mouse embryonic
 mesencephalon.
 CM Erratum in: J Neurosci Res 1995 Dec 15;42(6):855
 AU Santa-Olalla J; Covarrubias L
 CS Departamento de Biologia Molecular, Universidad Nacional Autonoma de
 Mexico, Cuernavaca, Morelos, Mexico.
 SO JOURNAL OF NEUROSCIENCE RESEARCH, (1995 oct 1) 42 (2) 172-83.
 Journal code: 7600111. ISSN: 0360-4012.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS MEDLINE; Priority Journals
 OS MEDLINE 96122596
 EM 199603
 ED Entered STN: 19960424
 Last Updated on STN: 19960424

L5 ANSWER 266 OF 269 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
 DUPLICATE 57
 AN 1994:487348 BIOSIS
 DN PREV199497500348
 TI Down regulation of ***nestin*** by ***TGF*** -beta or serum in SFME
 cells accompanies differentiation into astrocytes.

CS Irvine Res. Unit Brain Aging, Univ. Calif., Irvine, CA 92717, USA
 SO Neuroreport, (1994) Vol. 5, No. 13, pp. 1585-1588.
 CODEN: NERPEZ. ISSN: 0959-4965.
 DT Article
 LA English
 ED Entered STN: 9 Nov 1994
 Last Updated on STN: 9 Nov 1994

L5 ANSWER 267 OF 269 FEDRIP COPYRIGHT 2004 NTIS on STN
 AN 2004:69625 FEDRIP
 NR VA 80987
 NC 0008, 664
 TI Differentiation of Neural Progenitor Cells to a Dopaminergic Phenotype
 SF Principal Investigator: Shults, Clifford W., M.D.
 CSP Department of Veterans Affairs, Medical Center, San Diego, CA
 CSS Supported By: Department of Veterans Affairs. Research and Development
 (15), 810 Vermont Ave. N.W., Washington, D.C., 20420, United States of
 America
 DB Mar 1, 1991
 FS Department of Veterans Affairs

L5 ANSWER 268 OF 269 FEDRIP COPYRIGHT 2004 NTIS on STN
 AN 2004:69025 FEDRIP
 NR VA 111389
 NC 0007, 664
 TI The Development of Human Central Nervous System Stem Cells
 SF Principal Investigator: U, Hoi Sang, M.D.
 CSP Department of Veterans Affairs, Medical Center, San Diego, CA
 CSS Supported By: Department of Veterans Affairs. Research and Development
 (15), 810 Vermont Ave. N.W., Washington, D.C., 20420, United States of
 America
 DB Jan 3, 1996
 FS Department of Veterans Affairs

L5 ANSWER 269 OF 269 TOXCENTER COPYRIGHT 2004 ACS on STN
 AN 2002:579708 TOXCENTER
 DN DART-TER-1000639
 TI Effect of cytomegalovirus infection on the growth and differentiation of
 cultured mouse neural stem cells.
 AU Kosugi I; Kawasaki H; Li R Y; Arai Y; Baba S; Tsutsui Y
 CS 2nd Department of Pathology, Hamamatsu University, Hamamatsu, Shizuoka,
 Japan.
 SO Teratology 2001 Apr;63(4):21A-22A. Teratology,
 ISSN: 0040-3709.
 DT Abstract; (MEETING ABSTRACT)
 FS DART
 LA English
 ED Entered STN: 20021200
 Last Updated on STN: 20021200
 STN INTERNATIONAL LOGOFF AT 09:12:24 ON 05 MAR 2004